NOTICE OF MEETING
TRAFFIC AND TRANSPORTATION COMMISSION

Jude Abanulo, Chair

Garrett Clemons	**Alan Kaplan**
Thomas Gibney	**Jeremy Martin**
Cynthia Griffiths	**Mike Stein**
Gerald Holtz	**Melvin Willis**

Rockville City Hall
Black Eyed Susan Conference Room
Tuesday, March 22, 2016 at 7:30 PM

AGENDA

7:30 – 7:35	1. General Announcements, Introductions, and Public Comments
7:35 – 7:40	2. Research Row Development(1401, 1405 & 1413 Research Blvd) : Staff Introduction
7:40 – 8:00	3. Research Row Development(1401, 1405 & 1413 Research Blvd) : Applicant Presentation
8:00 – 8:20	4. Research Row Development(1401, 1405 & 1413 Research Blvd) : Commission Discussion
8:20 – 8:45	5. Role of the Commission
8:45 – 8:50	6. Review and Approve February 2016 Meeting Minutes
8:50 – 8:55	7. Staff Report & Updates
8:55 – 9:00	8. Additional Items/ Discussion

Next Meeting: Tuesday, April 26, 2016 at 7:30 PM

ANY INDIVIDUALS WITH DISABILITIES WHO WOULD REQUIRE ASSISTANCE TO ATTEND THIS MEETING, OR WHO HAVE QUESTIONS ABOUT ACCESSIBILITY MAY CONTACT THE ADA COORDINATOR AT 240-314-8108 OR BY TTY 240-314-8137

RESEARCH ROW
1401, 1405, & 1413 RESEARCH BOULEVARD
(NATIONAL CAPITAL RESEARCH PARK)

COMPREHENSIVE TRANSPORTATION REVIEW

COMPONENT 1
INTRODUCTION

1.1 Site Location and Project Overview

This report has been revised based on comments and feedback received from City Staff regarding the previously revised study submission, dated March 11, 2016. Point-by-point responses to City comments on the initial study submission are provided in Appendix A.

This report provides a Comprehensive Transportation Review (CTR) for the proposed redevelopment of the National Capital Research Park site located within the City of Rockville, Maryland. The Applicant, FP Research Boulevard, LLC on behalf of ARE/FP-Research Boulevard, LLC and ARE Research Group No. 8 Corp, is currently seeking approval of a level 2 site plan application that would allow for the partial redevelopment of the site with the addition of new retail and office uses (Research Row).

The existing three-story building located at 1405 Research Boulevard consists of approximately 73,000 SF of office space and would remain with the proposed development plan. The former 105,000 SF three-story Research and Development (R&D) building located at 1413 Research Boulevard was recently demolished in April of 2015 in preparation of the planned redevelopment. The original approval for the site also included an additional office building within the 1401 Research Boulevard lot for which APFO approval has since expired.

1.2 Site Overview

The site is conveniently situated along the north side of West Montgomery Avenue (MD 28) and west of Interstate 270 where a full-movement interchange provides regional access to both the north and south through Rockville and Montgomery County. An aerial graphic showing the site location and the adjacent road network is provided as Figure 1-1.

The property is currently zoned Mixed-Use-Employment (MXE) per the City of Rockville's Zoning Ordinance, and the proposed redevelopment includes a mix of office and retail uses consistent with those uses allowed within the MXE zone. Therefore, no changes to the existing zoning for the property are proposed with this application. Figure 1-2 illustrates the zoning for the subject site and the area surrounding the property.

Figure 1-1
Site Location and Area Road Network

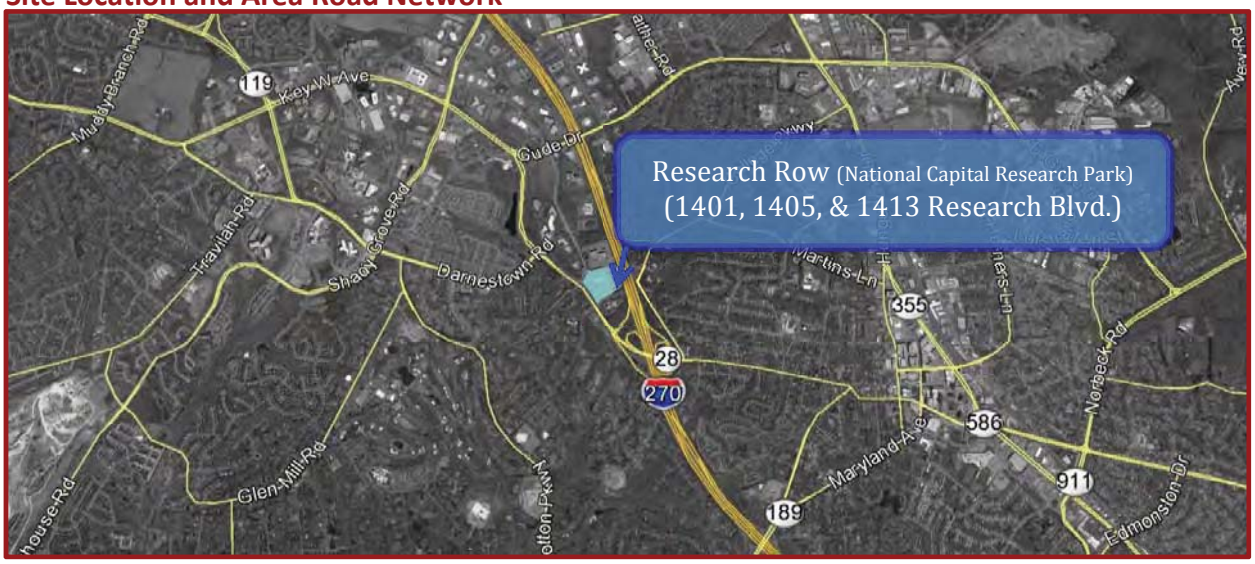
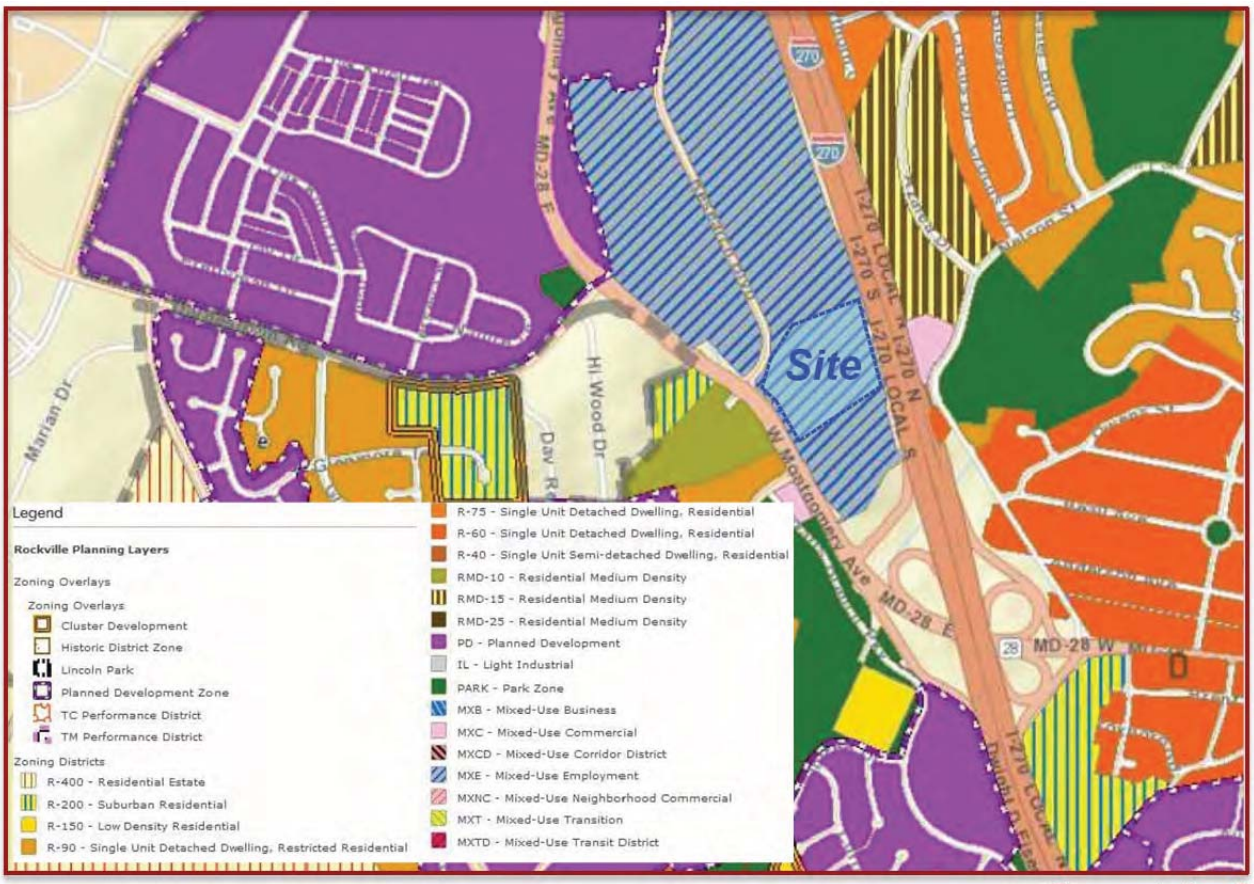


Figure 1-2
Zoning Map



1.3 Existing Land Use

The overall site (1401, 1405, & 1413) consists of approximately 13.38 acres of land area with one existing three-story building located at 1405 Research Boulevard providing approximately 73,000 SF of office uses. The 1413 Research Boulevard lot was recently occupied by a 105,000 SF R&D building that was demolished in April of 2015, and the 1401 Research Boulevard lot is currently improved with a surface parking lot.

1.4 Proposed Land Use

The 1401 and 1413 Research Boulevard lots are proposed to be fully redeveloped with a mix of new retail and office uses.

A reduced copy of the proposed development plan is provided on Figure 1-3.

Note: The site trip generation calculated during the scoping process was based on a preliminary mix of 117,600 SF of retail uses and 15,300 SF of new office uses; however, the current plan includes a reduced development mix of up to 102,535 SF of GLA for retail uses and 10,165 SF of new office uses. Since the proposed plan would generate fewer trips, the study area would not increase beyond that which was identified during the scoping process. The existing 73,000 SF office building is to remain, and the 105,000 SF R&D building has been demolished.

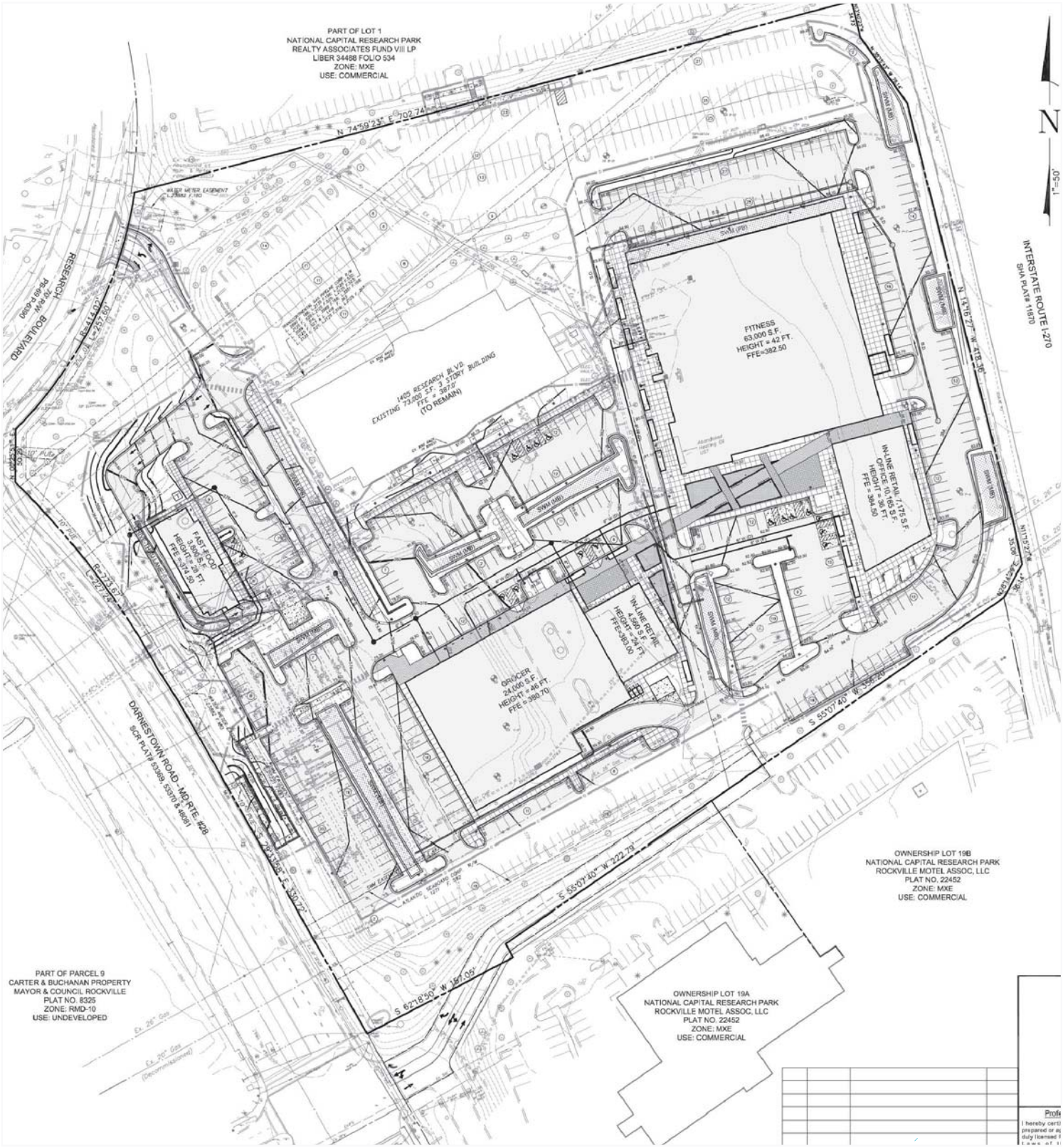


Figure 1-3
Proposed Redevelopment Plan (Research Row)
Research Row CTR
City of Rockville, Maryland

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Figure 1-4
Thresholds for Mitigation Requirements (CTR Guidelines - Table 3)

Table 3: Mitigation Requirements	
New Peak Hour Site Trips	**Requirement**
0 – 29	None
30 – 124	Transportation Improvement Fee Intersection Mitigation if exceeds Intersection Impact Thresholds
125 – 349	Transportation Improvement Fee Intersection Mitigation if exceeds Intersection Impact Thresholds Trip Reduction Plan consistent with Trip Reduction Tool for Office Uses
350 +	Transportation Improvement Fee Intersection Mitigation if exceeds Intersection Impact Thresholds Trip Reduction Plan consistent with Trip Reduction Tool for Office Uses Transportation Improvement Contribution consistent with Multimodal Analysis

See Table 1-1

The results of the baseline trip generation estimates are summarized on Table 1-1 and indicate that the proposed new retail and office uses would generate approximately 206 total trips during the weekday AM peak hour, 784 total trips during the weekday PM peak hour, and 894 total trips during the mid-day peak hour on Saturday.

The 105,000 SF R&D building (recently demolished) would generate approximately 136 total trips during the weekday AM peak hour, 138 total trips during the weekday PM peak hour, and 29 total trips during the mid-day peak hour on Saturday.

Table 1-1
Baseline Trip Generation Comparison

	Rate			AM Peak Hour			PM Peak Hour			SAT Peak Hour		
Development/Land Use	Source	Size	Units	In	Out	Total	In	Out	Total	In	Out	Total
Approved Conditions												
Existing Building (Demolished)												
Research and Development [1]	ITE (760)	105,000	GFA	113	23	136	21	117	138	17	12	29
Proposed Conditions												
New Buildings/Uses												
General Office [2]	LATR	10,165	GFA	13	2	15	4	19	23	3	2	5
Retail (Without Major Grocer) [3]	LATR	102,535	GLA	100	91	191	396	365	761	462	427	889
Total Proposed Site Trips				**113**	**93**	**206**	**400**	**384**	**784**	**465**	**429**	**894**
Net Total Site Trips (Proposed vs. Approved)				**-**	**70**	**70**	**379**	**267**	**646**	**448**	**417**	**865**

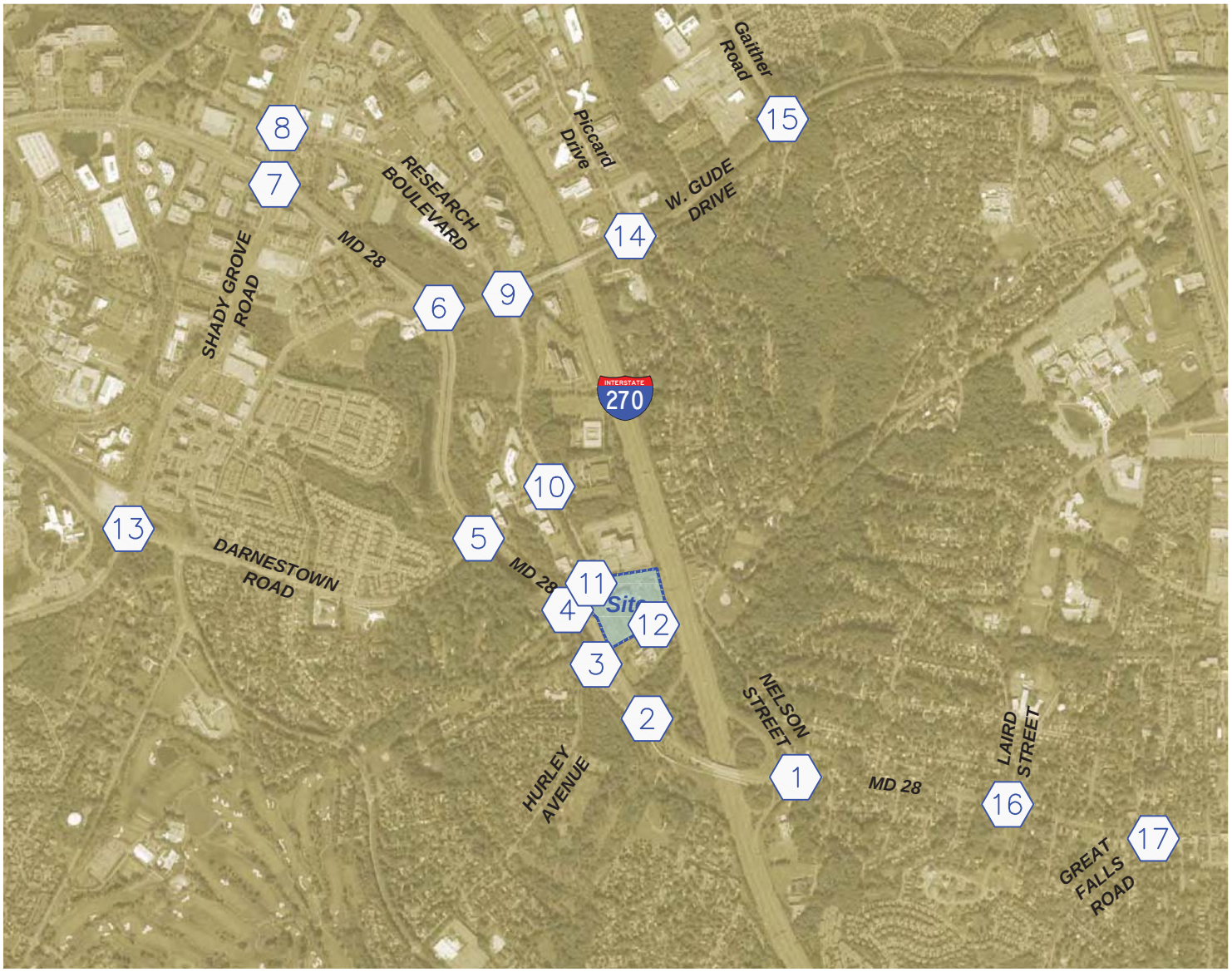
Notes: (1) Trip generation based on rates and equations in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, *Ninth Edition.*
(2) Weekday AM and PM calculations based on the LATR equations for office uses. ITE equations were used for Saturday calculations.
(3) Weekday AM and PM calculations based on the LATR equations for retail uses without a "Major Grocer". ITE equations were used for Saturday calculations.

When comparing the baseline trip generation estimates for the proposed new retail and office uses to the estimates for the recently demolished 105,000 SF of R&D uses, the proposed new uses would generate approximately 70 total net additional weekday AM peak hour trips, 646 total net additional weekday PM peak hour trips, and 865 total net additional mid-day peak hour trips on a Saturday. It is noted that, since the existing 73,000 SF office building will remain with the proposed plan and it was occupied at the time traffic count data was collected, the trips associated with that building were not included when calculating the impact of the site redevelopment. Based on these estimates, the corresponding mitigation requirements for this project are identified on Figure 1-4 (Table 3 from the City's CTR Guidelines) and include the following:

Mitigation Requirements: Projects Generating 350+ Total Additional Site Trips

- Transportation Improvement Fee
- Intersection Mitigation if exceeds Intersection Impact Thresholds
- Trip Reduction Plan consistent with Trip Reduction Tool for Office Uses
- Transportation Improvement Contribution Consistent With Multimodal Analysis

As previously noted and as outlined in the March 21, 2011 CTR Guidelines, the above estimates were used to identify the base Mitigation Requirements for the project, with the peak hour trips to be adjusted to include pass-by trip reductions for retail uses and reductions for existing uses to be removed in order to identify any specific intersection mitigation (if any) that would be required as a result of the proposed redevelopment.



1. *W. Montgomery Ave. (MD 28) / I-270 Off-Ramp / Nelson St*
2. *W. Montgomery Ave. (MD 28) / I-270 SB Ramps*
3. *W. Montgomery Ave. (MD 28) / Hurley Avenue*
4. *W. Montgomery Ave. (MD 28) / Research Blvd / Crofton Lane*
5. *W. Montgomery Ave. (MD 28) / Darnestown Road*
6. *W. Montgomery Ave. (MD 28) / West Gude Drive*
7. *W. Montgomery Ave. (MD 28) / Shady Grove Road*
8. *Research Blvd / Shady Grove Rd*
9. *Research Blvd / W. Gude Dr.*
10. *Research Blvd / 1600 Research Blvd Driveway*
11. *Research Blvd / Site Driveway*
12. *Access Drive / Site Driveway*
13. *Shady Grove Rd / Darnestown Rd*
14. *W Gude Dr / Piccard Dr*
15. *W Gude Dr / Gaither Rd*
16. *W. Montgomery Ave. (MD 28) / Laird St*
17. *W. Montgomery Ave. (MD 28) / Great Falls Rd*

Figure 2-1
CTR Study Intersections
Research Row
City of Rockville, Maryland

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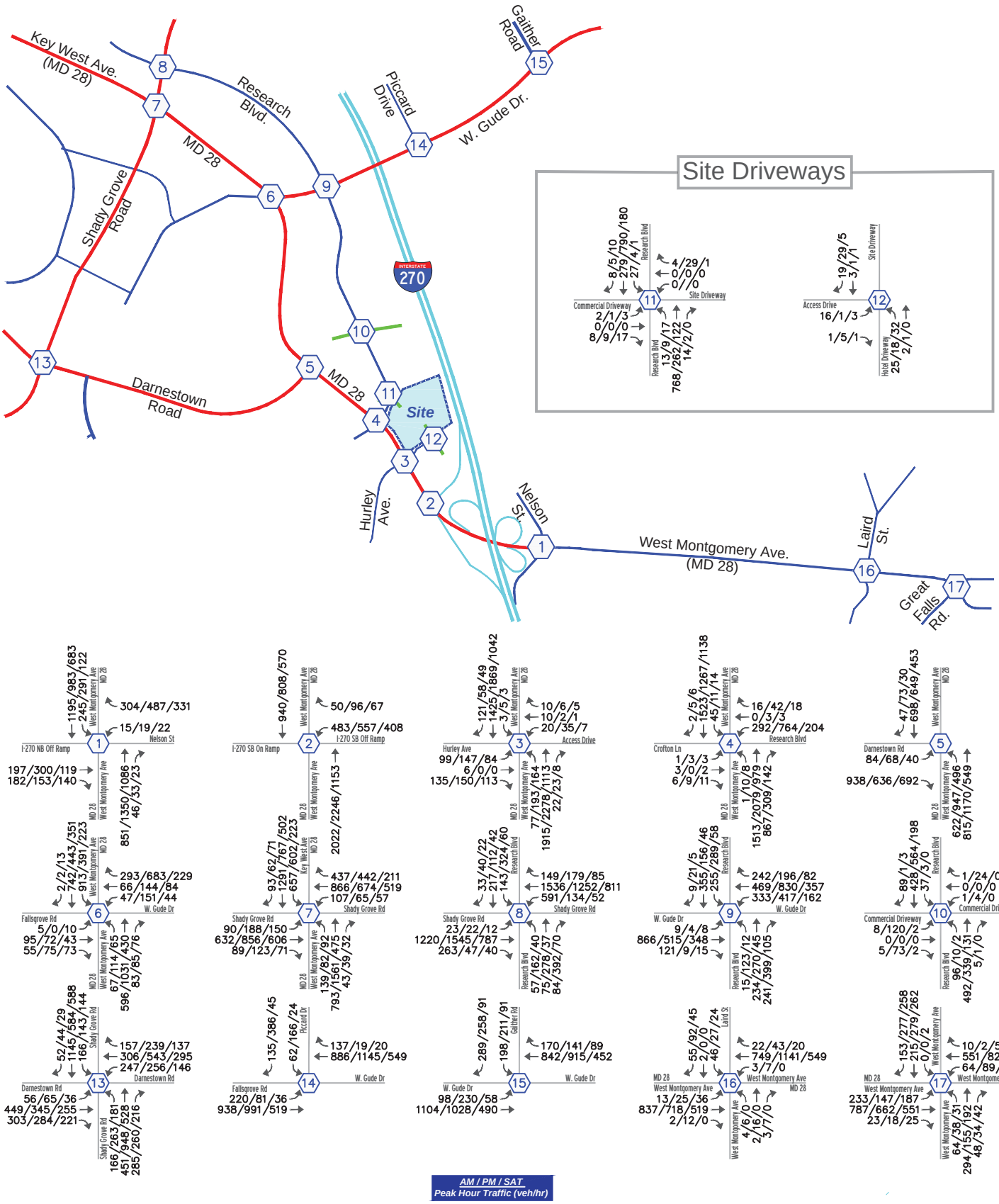

Figure 2-2

Baseline 2014 Weekday AM and PM & Saturday Mid-Day Peak Hour Volumes

Research Row CTR

City of Rockville, Maryland

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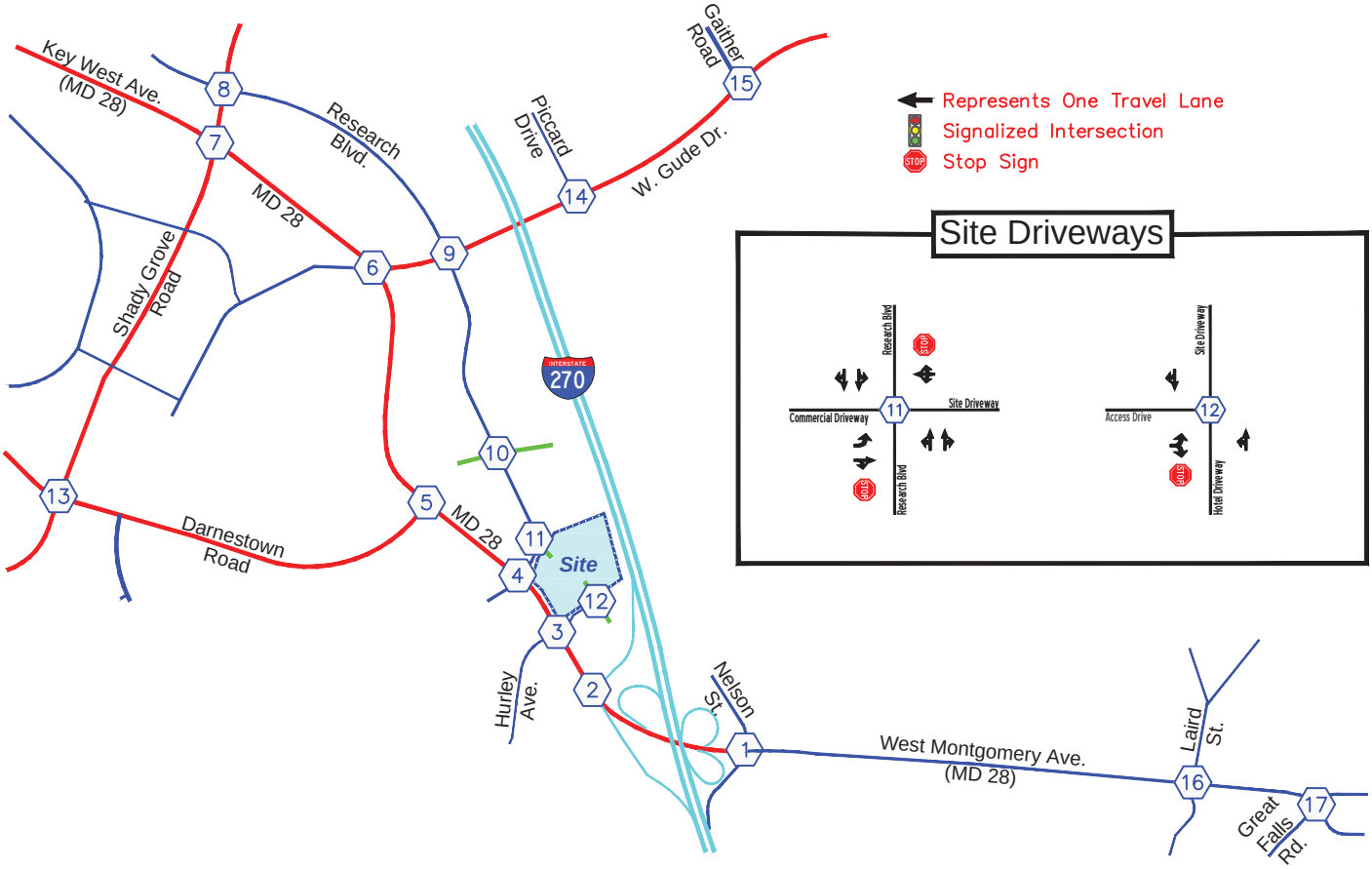

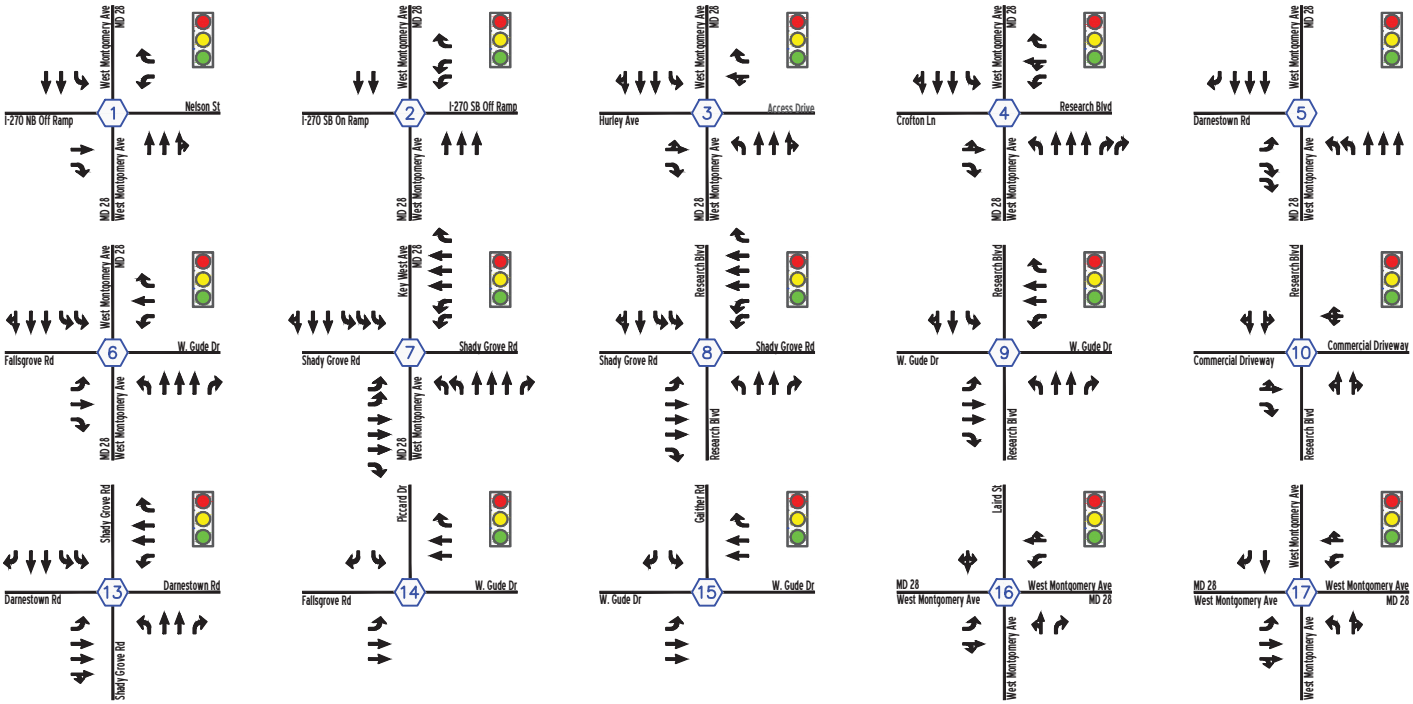

Figure 3-1
Existing Lane Use and Traffic Controls at Study Intersection
Research Row CTR
City of Rockville, Maryland

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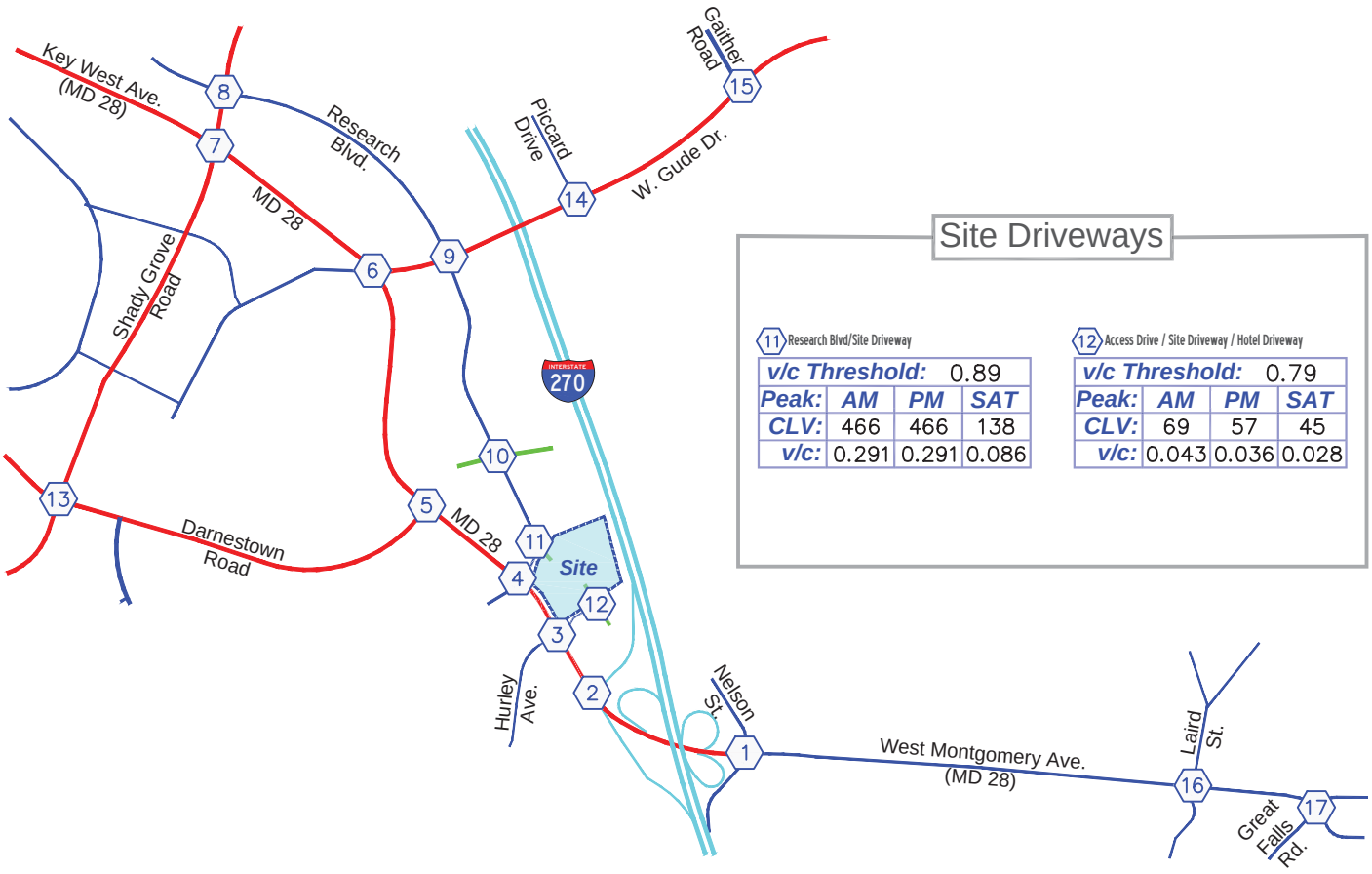
Table 3-1
Capacity Thresholds for Study Area Intersections

Intersection	Signal Phases	Cycle Length			Congestion Standard			V/C Ratio Threshold
		AM	PM	SAT	AM	PM	SAT	
01. W. Montgomery Ave (MD 28) / Nelson Ave	4	120	120	110	1500	1500	1400	0.99
Signalized Control								
02. W. Montgomery Ave (MD 28) / I-270 SB Ramps	2	120	120	110	1650	1650	1600	0.99
Signalized Control								
03. W. Montgomery Ave (MD 28) / Hurley Ave	3	120	120	110	1600	1600	1500	0.89
Signalized Control								
04. W. Montgomery Ave (MD 28) / Research Blvd	4	120	120	110	1500	1500	1400	0.89
Signalized Control								
05. W. Montgomery Ave (MD 28) / Darnestown Rd	3	120	120	110	1600	1600	1500	0.89
Signalized Control								
06. W. Montgomery Ave (MD 28) / Gude Dr	3	150	150	150	1650	1650	1650	0.99
Signalized Control								
07. W. Montgomery/Key West Ave (MD 28) / Shady Grove Rd	4	150	150	150	1550	1550	1550	0.99
Signalized Control								
08. Research Blvd / Shady Grove Rd	4	150	150	150	1550	1550	1550	0.89
Signalized Control								
09. Research Blvd / Gude Dr	4	120	120	90	1500	1500	1400	0.89
Signalized Control								
10. Research Blvd / 1600 Research Driveway	2	60	60	60	150	1500	1500	0.89
Signalized Control								
11. Research Blvd / Site Driveway	2	90	90	90	1600	1600	1600	0.89
Two-Way Stop Control								
12. Access Drive / Site Driveway	2	90	90	90	1600	1600	1600	0.79
Two-Way Stop Control								
13. Shady Grove Rd / Darnestown Rd	4	120	120	120	1500	1500	1500	0.89
Signalized Control								
14. West Gude Dr / Piccard Dr	3	100	100	90	1500	1500	1500	0.89
Side-Street Stop Controlled								
15. West Gude Dr / Gaither Rd	3	100	100	100	1500	1500	1500	0.89
Side-Street Stop Controlled								
16. W. Montgomery Ave (MD 28) / Laird St	2	120	120	90	1650	1650	1600	0.89
Side-Street Stop Controlled								
17. W. Montgomery Ave (MD 28) / Great Falls Rd	3	90	120	90	1500	1600	1500	0.99
Side-Street Stop Controlled								

Intersection Capacity (100% of capacity)

Cycle Length (seconds)	Number of Phases		
	2	3	4 or more
0 - 89	1500	1400	1300
90 - 119	1600	1500	1400
120 - 149	1650	1600	1500
150 - 999	1700	1650	1550



1 W. Montgomery Ave (MD 28)/I-270 NB Ramp/Nelson St

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	867	1301	881
v/c:	0.578	0.867	0.629

2 West Montgomery Ave (MD 28)/I-270 SB Ramps

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1038	1165	672
v/c:	0.629	0.706	0.420

3 West Montgomery Ave (MD 28)/Hurley Ave

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	861	1128	685
v/c:	0.538	0.705	0.457

4 West Montgomery Ave (MD 28)/Research Blvd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	790	1244	562
v/c:	0.527	0.829	0.401

5 West Montgomery Ave (MD 28)/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	755	883	535
v/c:	0.472	0.552	0.357

6 West Montgomery Ave (MD 28)/W. Gude Dr

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	916	854	388
v/c:	0.555	0.518	0.235

7 West Montgomery Ave (MD 28)/Shady Grove Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	969	1181	549
v/c:	0.625	0.762	0.354

8 Research Blvd/Shady Grove Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1002	1158	400
v/c:	0.646	0.747	0.258

9 Research Blvd/West Gude Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1230	1193	450
v/c:	0.820	0.795	0.321

10 Research Blvd/1600 Research Blvd Driveway

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	431	475	112
v/c:	0.287	0.317	0.075

13 Shady Grove Rd/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1365	1165	893
v/c:	0.910	0.777	0.595

14 West Gude Dr/Piccard Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	780	993	357
v/c:	0.520	0.662	0.238

15 West Gude Dr/Gaither Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	803	970	404
v/c:	0.535	0.647	0.269

16 West Montgomery Ave (MD 28)/Laird St

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	954	1341	681
v/c:	0.578	0.813	0.426

17 West Montgomery Ave (MD 28)/Great Falls Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1159	1313	1134
v/c:	0.724	0.821	0.756

Figure 3-4
Baseline 2014 CLV & v/c
Research Row CTR
City of Rockville, Maryland

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COMPONENT 4
2019 BACKGROUND FUTURE CONDITIONS (WITHOUT THE PROPOSED REDEVELOPMENT)

4.1 Overview

This section provides an evaluation of the forecasted 2019 background future traffic conditions at each of the 17 study intersections without the proposed redevelopment of the site. One (1) pipeline project was identified by City of Rockville Staff for inclusion in the forecasts and analyses.

4.2 Pipeline Projects:

The pipeline development included in this study is listed on the scoping letter issued by the City of Rockville (see Appendix A) and is detailed below. The locations of each pipeline development component are identified on Figure 4-1.

Fallsgrove:

(A) 90,308 SF of Medical Office *(East of MD 28 & North of W. Gude Dr.)*

(B-1) 212,844 SF of General Office *(Key West Center at Fallsgrove)*

(B-2) 180,000 SF of General Office (1700 Research Boulevard)

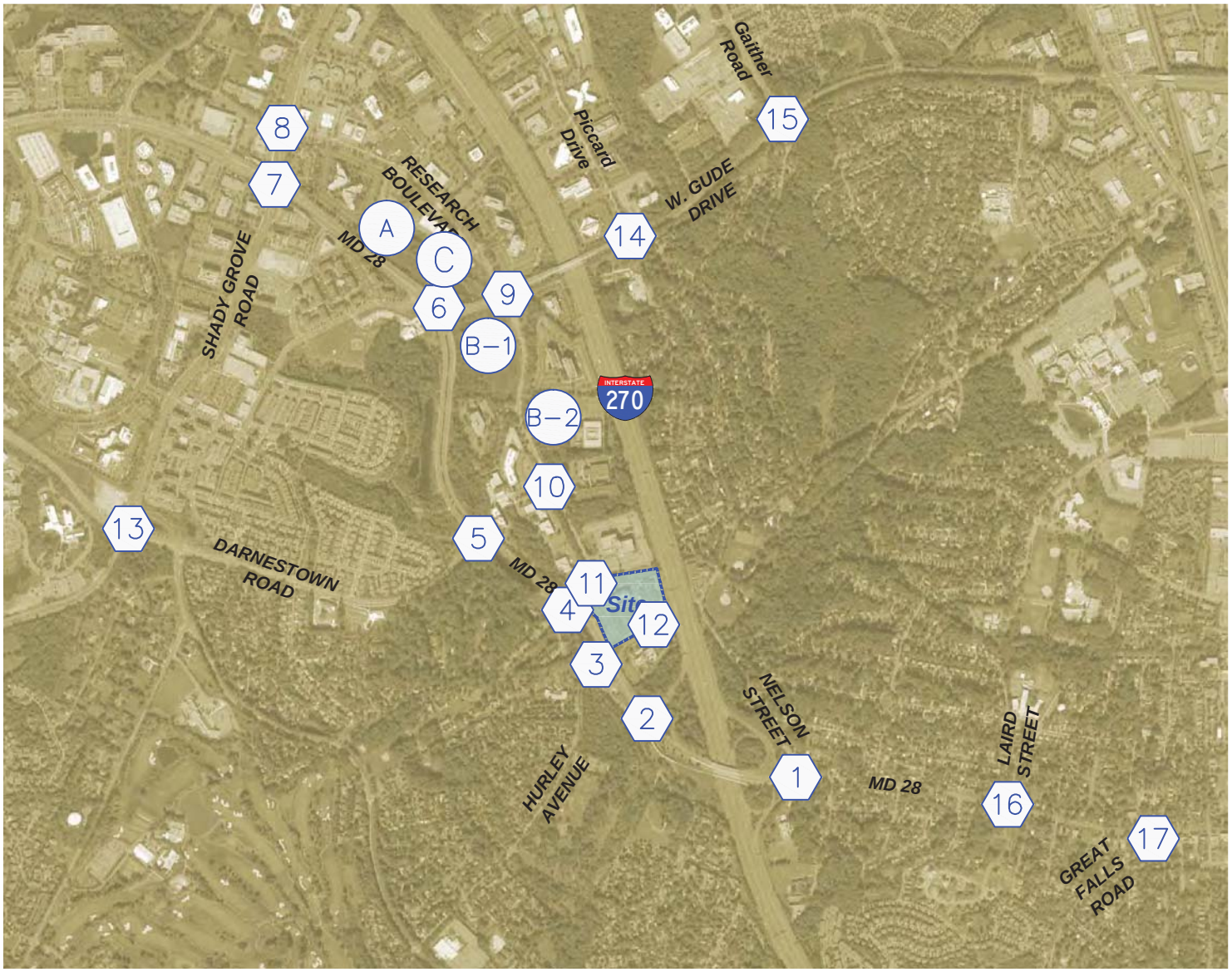
(C) 80,000 SF of General Office (*West of Research Blvd. & North of W. Gude Dr.)*

4.3 Pipeline Projects Trip Generation

Trip generation estimates for each Pipeline project component were prepared as directed in the City's CTR Guidelines. A summary of the trip generation for each pipeline development is provided in Table 4-1 below and indicates that the pipeline development would generate a combined total of 996 AM and 1,009 PM peak hour trips on a weekday, and 533 mid-day peak hour trips on Saturday. The combined traffic assignments for all pipeline development components are summarized on Figure 4-2(D), and approved individual pipeline development component traffic assignments are provided on Figures 4-2(A), 4-2(B-1), 4-2(B-2), and 4-2(C) and in Appendix F.

Table 4-1
Pipeline Development Trip Generation

			AM Peak Hour			PM Peak Hour			SAT Peak Hour		
Development/Land Use	Size	Units	In	Out	Total	In	Out	Total	In	Out	Total
1. Fallsgrove											
(A) Medical Office (East of Shady Grove Rd. & North of W. Gude Dr.)	*90,308*	*SF*	*171*	*45*	*216*	*74*	*192*	*266*	*187*	*141*	*328*
(B-1) General Office (Key West Center at Fallsgrove)	*212,844*	*SF*	*308*	*46*	*354*	*56*	*271*	*327*	*50*	*42*	*92*
(B-2) General Office (1711 Research Boulevard)	*180,000*	*SF*	*259*	*39*	*298*	*48*	*232*	*280*	*42*	*36*	*78*
(C) General Office (West of Research Blvd. & North of W. Gude Dr.)	*80,000*	*SF*	*111*	*17*	*128*	*23*	*113*	*136*	*19*	*16*	*35*
Subtotal - Fallsgrove Pipeline Trips	563,152	SF	849	147	996	201	808	1,009	298	235	533
Total Pipeline Development Trips			**849**	**147**	**996**	**201**	**808**	**1,009**	**298**	**235**	**533**



A ***Fallsgrove - 90,308 SF of Medical Office***

B–1 ***Fallsgrove - 212,844 SF of Office***

B–2 ***Fallsgrove - 180,000 SF of Office***

C ***Fallsgrove - 80,000 SF of Office***

Figure 4-1
Pipeline Locations
Research Row
City of Rockville, Maryland

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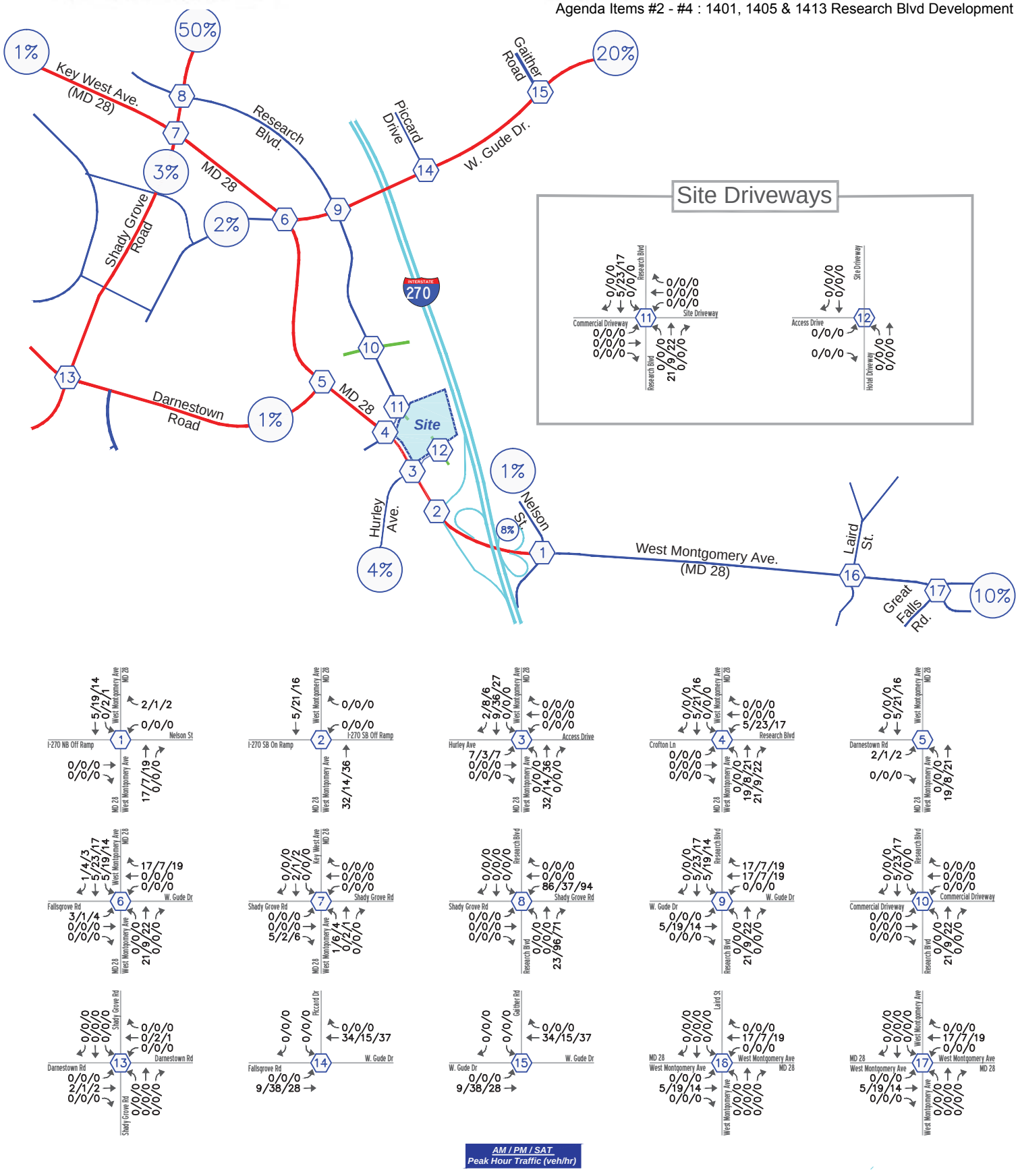

Figure 4-2(A)

Fallsgrove - 90,308 SF of Medical Office

Research Row CTR

City of Rockville, Maryland

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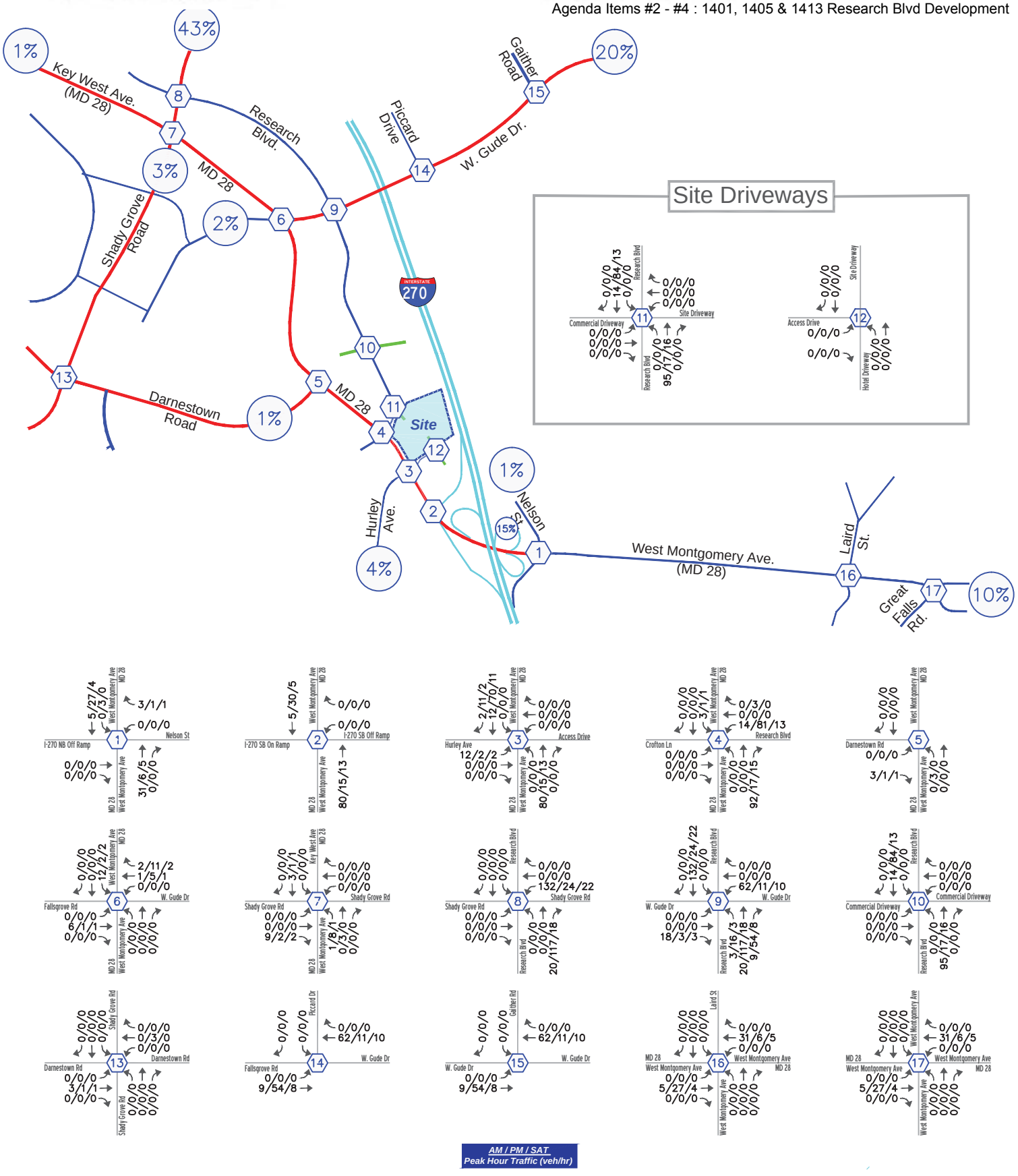

Figure 4-2(B-1)
Fallsgrove - 212,844 SF of Office
Research Row CTR
City of Rockville, Maryland

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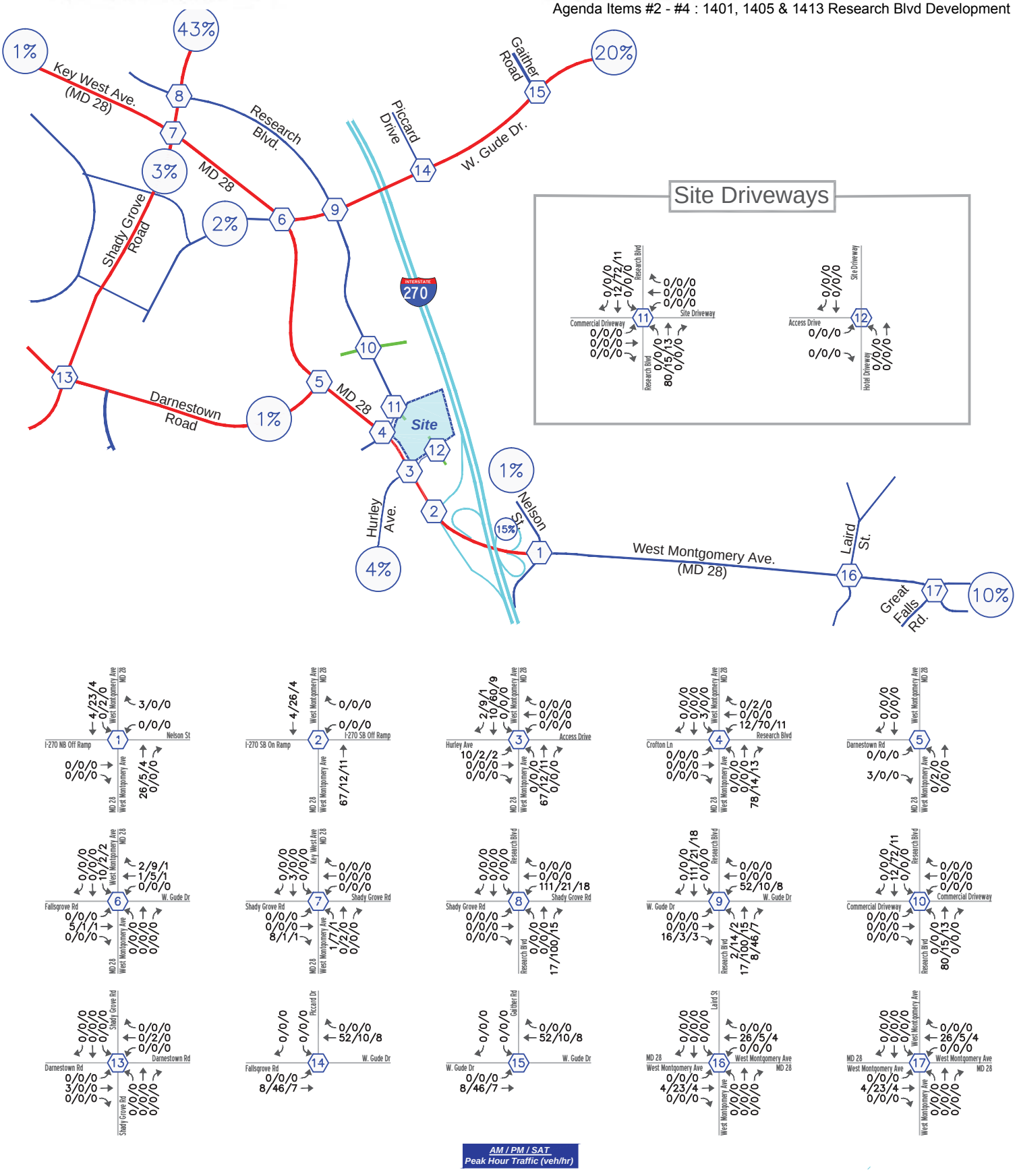

Figure 4-2(B-2)
Fallsgrove - 180,000 SF of Office
Research Row CTR
City of Rockville, Maryland

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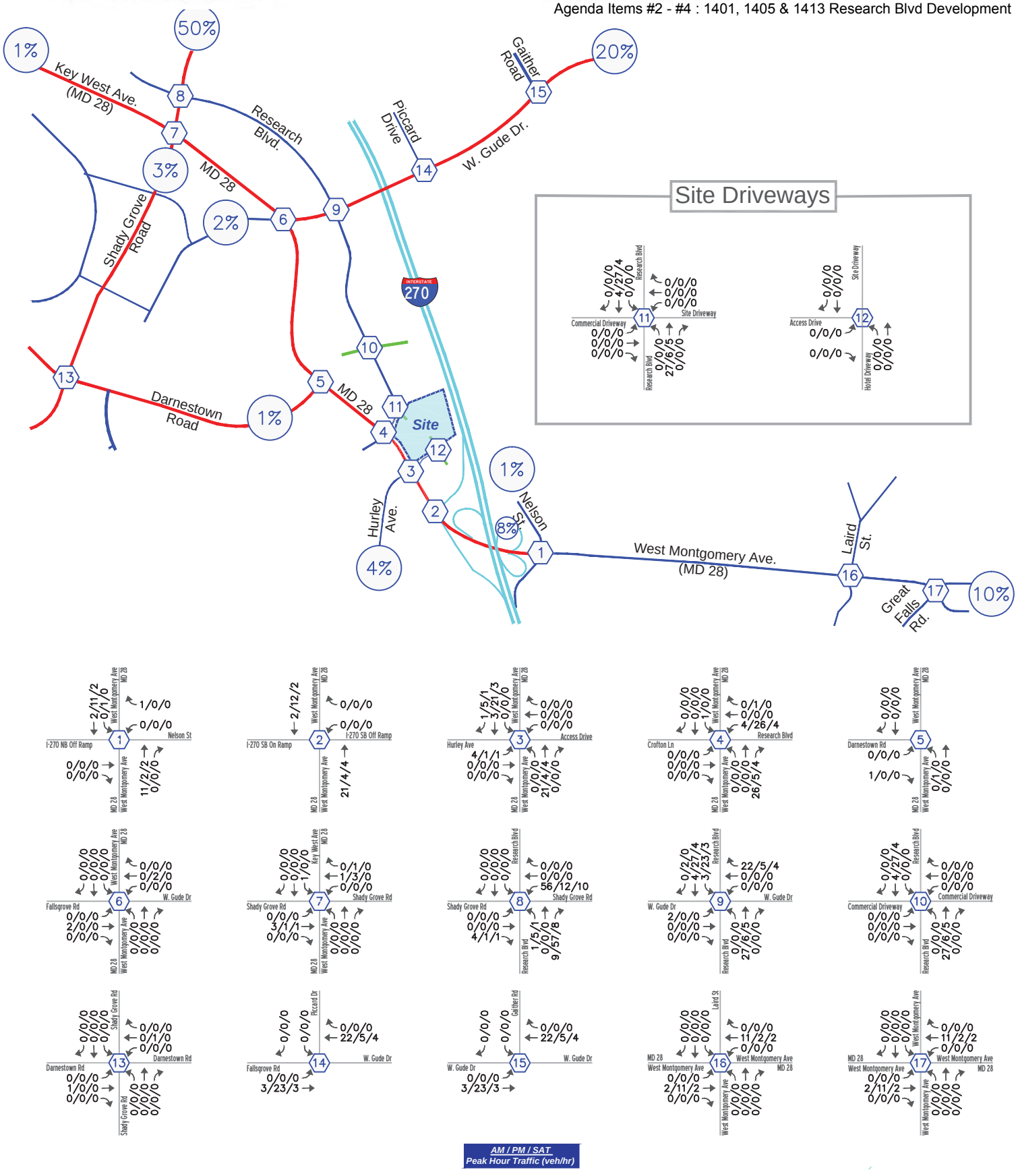

Figure 4-2(C)
Fallsgrove - 80,000 SF of Office
Research Row CTR
City of Rockville, Maryland

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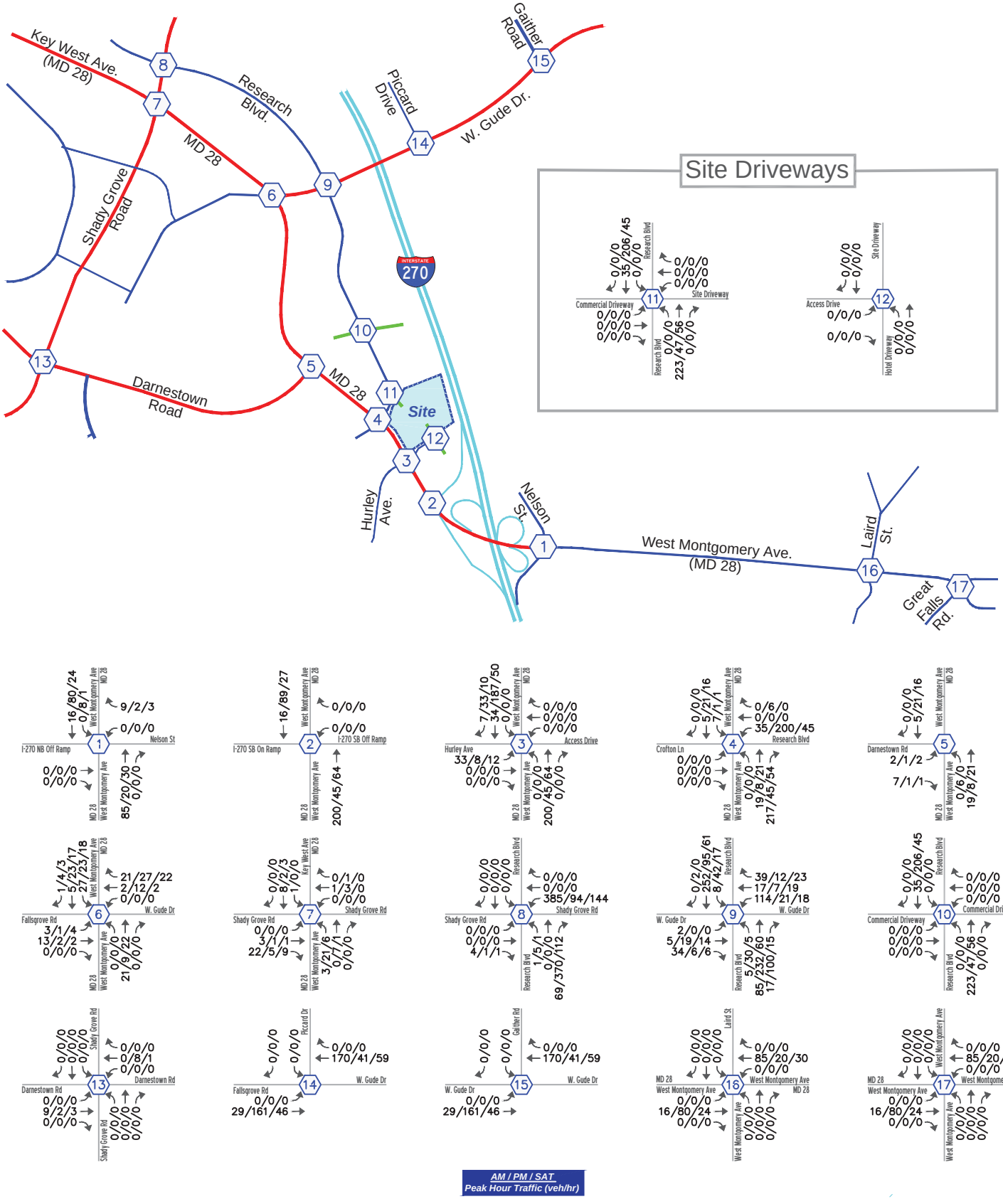

Figure 4-2(D)
Combined Total Traffic For All Pipeline Developments
Research Row CTR
City of Rockville, Maryland

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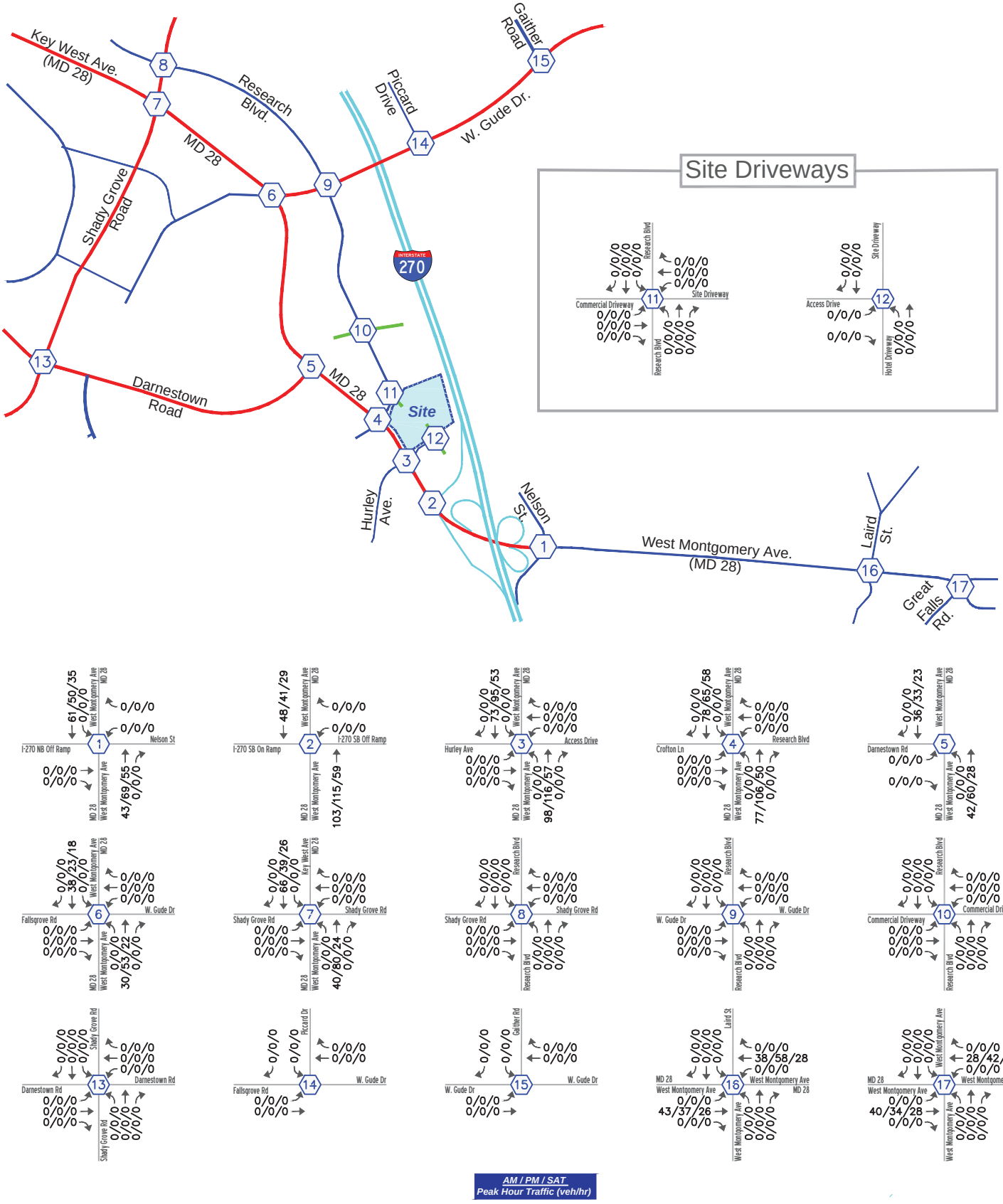

Figure 4-3

Regional Growth in Through Traffic Along MD 28 (1% Annual from 2014-2019)

Research Row CTR

City of Rockville, Maryland

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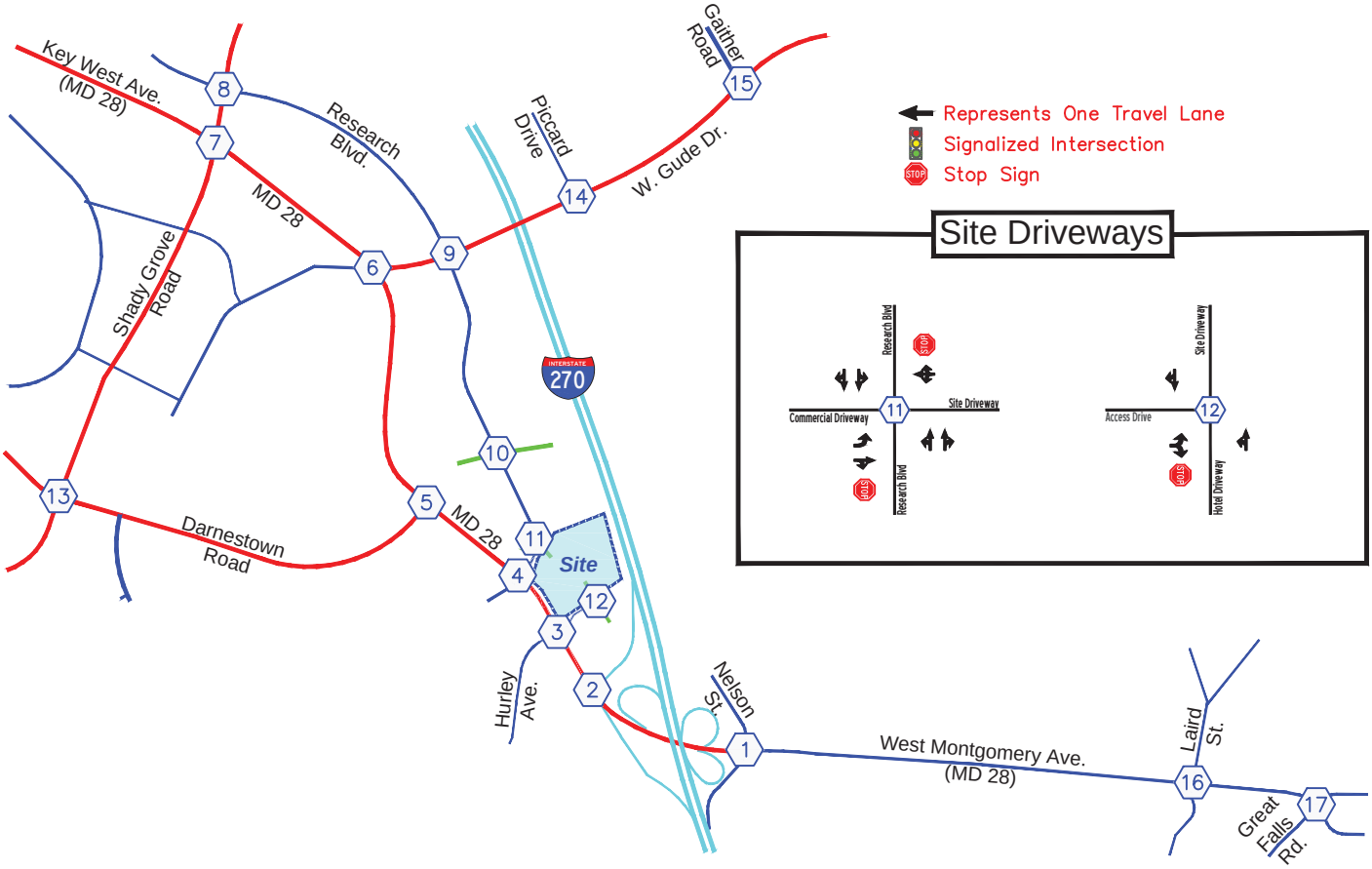

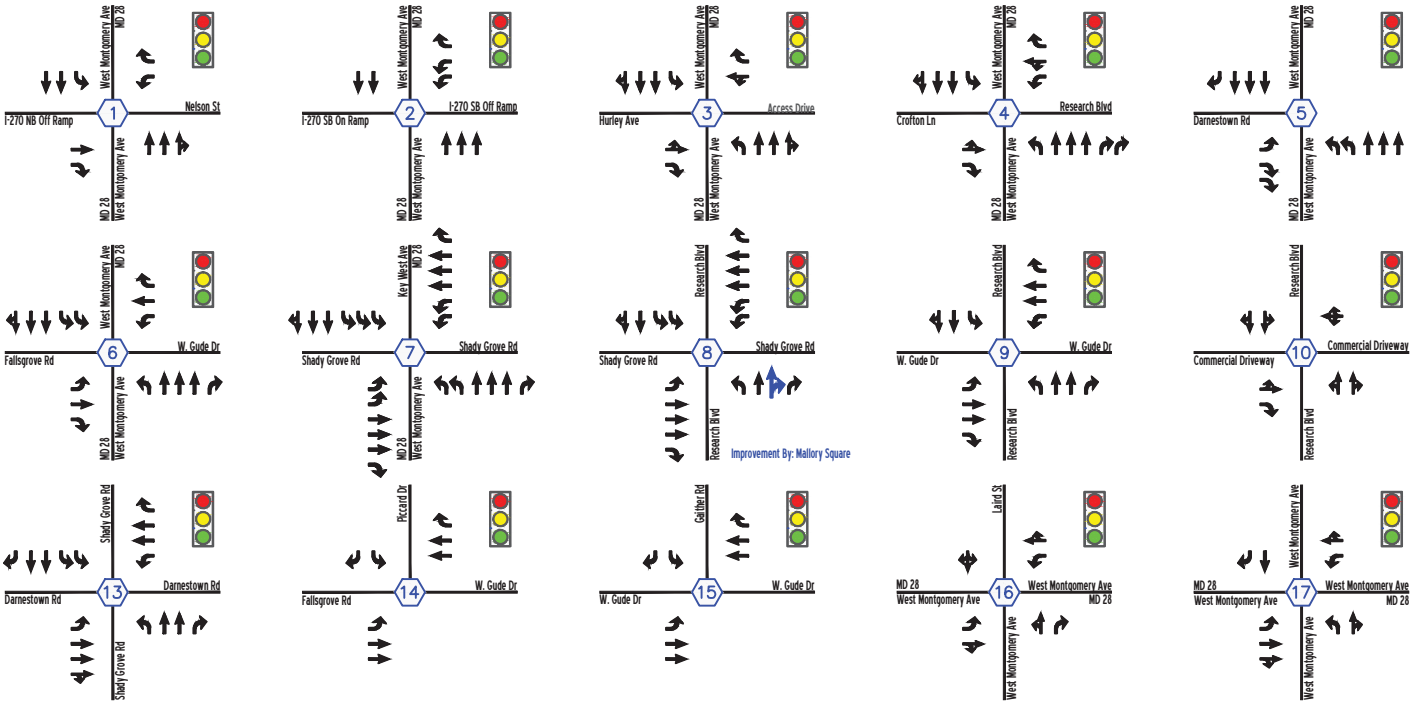

Figure 4-5
Background Future Lane Use and Traffic Controls
Research Row CTR
City of Rockville, Maryland

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Table 4-2
Background Critical Lane Volume (CLV) and Volume-To-Capacity (v/c) Summary

Intersection	Congestion Standard (100% Capacity)	v/c Threshold	Measure of Performance	Baseline Existing AM	Baseline Existing PM	Baseline Existing SAT	Background Future (Year 2019) AM	Background Future (Year 2019) PM	Background Future (Year 2019) SAT
01. W. Montgomery Ave (MD 28) / Nelson Ave	AM 1500 PM 1500 SAT 1400	v/c 0.99 (max)		01. W. Montgomery Ave (MD 28) / Nelson Ave					
	Signalized Intersection		CLV	867	1301	881	920	1337	917
			v/c	0.578	0.867	0.629	0.613	0.891	0.655
			LOS	A	D	B	B	D	B
02. W. Montgomery Ave (MD 28) / I-270 SB Ramps	AM 1650 PM 1650 SAT 1600	v/c 0.99 (max)		02. W. Montgomery Ave (MD 28) / I-270 SB Ramps					
	Signalized Intersection		CLV	1038	1165	672	1173	1229	720
			v/c	0.629	0.706	0.42	0.711	0.745	0.45
			LOS	B	C	A	C	C	A
03. W. Montgomery Ave (MD 28) / Hurley Ave	AM 1600 PM 1600 SAT 1500	v/c 0.89 (max)		03. W. Montgomery Ave (MD 28) / Hurley Ave					
	Signalized Intersection		CLV	861	1128	685	1072	1357	751
			v/c	0.538	0.705	0.457	0.67	0.848	0.501
			LOS	A	C	A	B	D	A
04. W. Montgomery Ave (MD 28) / Research Blvd	AM 1500 PM 1500 SAT 1400	v/c 0.89 (max)		04. W. Montgomery Ave (MD 28) / Research Blvd					
	Signalized Intersection		CLV	790	1244	562	861	**1415**	617
			v/c	0.527	0.829	0.401	0.574	**0.943**	0.441
			LOS	A	D	A	A	**E**	A
05. W. Montgomery Ave (MD 28) / Darnestown Rd	AM 1600 PM 1600 SAT 1500	v/c 0.89 (max)		05. W. Montgomery Ave (MD 28) / Darnestown Rd					
	Signalized Intersection		CLV	755	883	535	783	915	550
			v/c	0.472	0.552	0.357	0.489	0.572	0.367
			LOS	A	A	A	A	A	A
06. W. Montgomery Ave (MD 28) / Gude Dr	AM 1650 PM 1650 SAT 1650	v/c 0.99 (max)		06. W. Montgomery Ave (MD 28) / Gude Dr					
	Signalized Intersection		CLV	916	854	388	964	895	422
			v/c	0.555	0.518	0.235	0.584	0.542	0.256
			LOS	A	A	A	A	A	A
07. W. Montgomery/Key West Ave (MD 28) / Shady Grove Rd	AM 1550 PM 1550 SAT 1550	v/c 0.99 (max)		07. W. Montgomery/Key West Ave (MD 28) / Shady Grove Rd					
	Signalized Intersection		CLV	969	1181	549	1002	1216	564
			v/c	0.625	0.762	0.354	0.646	0.785	0.364
			LOS	B	C	A	B	C	A
08. Research Blvd / Shady Grove Rd	AM 1550 PM 1550 SAT 1550	v/c 0.89 (max)		08. Research Blvd / Shady Grove Rd					
	Signalized Intersection		CLV	1002	1158	400	1235	1289	526
			v/c	0.646	0.747	0.258	0.797	0.832	0.339
			LOS	B	C	A	C	D	A
09. Research Blvd / Gude Dr	AM 1500 PM 1500 SAT 1400	v/c 0.89 (max)		09. Research Blvd / Gude Dr					
	Signalized Intersection		CLV	1230	1193	450	**1415**	**1397**	530
			v/c	0.820	0.795	0.321	**0.943**	**0.931**	0.379
			LOS	D	C	A	**E**	**E**	A
10. Research Blvd / 1600 Research Driveway	AM 1500 PM 1500 SAT 1500	v/c 0.89 (max)		10. Research Blvd / 1600 Research Driveway					
	Signalized Intersection		CLV	431	475	112	537	584	136
			v/c	0.287	0.317	0.075	0.358	0.389	0.091
			LOS	A	A	A	A	A	A
11. Research Blvd / Site Driveway	AM 1600 PM 1600 SAT 1600	v/c 0.89 (max)		11. Research Blvd / Site Driveway					
	Two-Way Stop Control		CLV	466	466	138	594	582	162
			v/c	0.291	0.291	0.086	0.371	0.364	0.101
			LOS	A	A	A	A	A	A
12. Access Drive / Site Driveway	AM 1600 PM 1600 SAT 1600	v/c 0.79 (max)		12. Access Drive / Site Driveway					
	Two-Way Stop Control		CLV	69	57	45	203	189	73
			v/c	0.043	0.036	0.028	0.127	0.118	0.046
			LOS	A	A	A	A	A	A
13. Shady Grove Rd / Darnestown Rd	AM 1500 PM 1500 SAT 1500	v/c 0.89 (max)		13. Shady Grove Rd / Darnestown Rd					
	Signalized Intersection		CLV	**1365**	1165	893	**1366**	1171	894
			v/c	**0.910**	0.777	0.595	**0.911**	0.781	0.596
			LOS	**E**	C	A	**E**	C	A
14. West Gude Dr / Piccard Dr	AM 1500 PM 1500 SAT 1500	v/c 0.89 (max)		14. West Gude Dr / Piccard Dr					
	Signalized Intersection		CLV	780	993	357	871	1015	389
			v/c	0.520	0.662	0.238	0.581	0.677	0.259
			LOS	A	B	A	A	B	A
15. West Gude Dr / Gaither Rd	AM 1500 PM 1500 SAT 1500	v/c 0.89 (max)		15. West Gude Dr / Gaither Rd					
	Signalized Intersection		CLV	803	970	404	864	992	435
			v/c	0.535	0.647	0.269	0.576	0.661	0.29
			LOS	A	B	A	A	B	A
16. W. Montgomery Ave (MD 28) / Laird St	AM 1650 PM 1650 SAT 1600	v/c 0.99 (max)		16. W. Montgomery Ave (MD 28) / Laird St					
	Signalized Intersection		CLV	954	1341	681	1043	1423	742
			v/c	0.578	0.813	0.426	0.632	0.862	0.464
			LOS	A	D	A	B	D	A
17. W. Montgomery Ave (MD 28) / Great Falls Rd	AM 1500 PM 1600 SAT 1500	v/c 0.99 (max)		17. W. Montgomery Ave (MD 28) / Great Falls Rd					
	Signalized Intersection		CLV	1159	1313	1134	1295	1379	1199
			v/c	0.724	0.821	0.756	0.809	0.862	0.799
			LOS	C	D	C	D	D	C

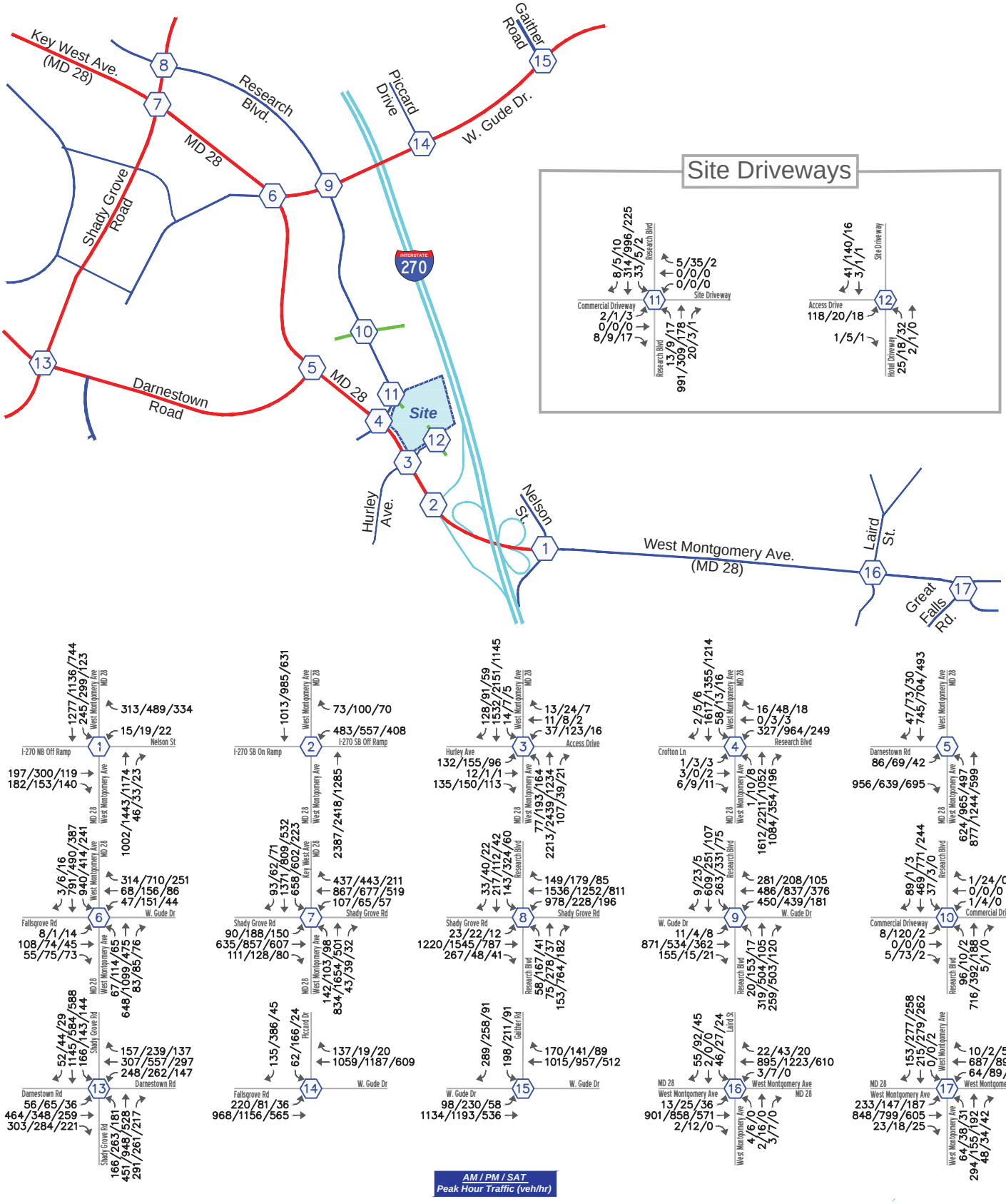

Figure 4-6
2019 Background Future Traffic Forecasts (No-Build)
Research Row CTR
City of Rockville, Maryland

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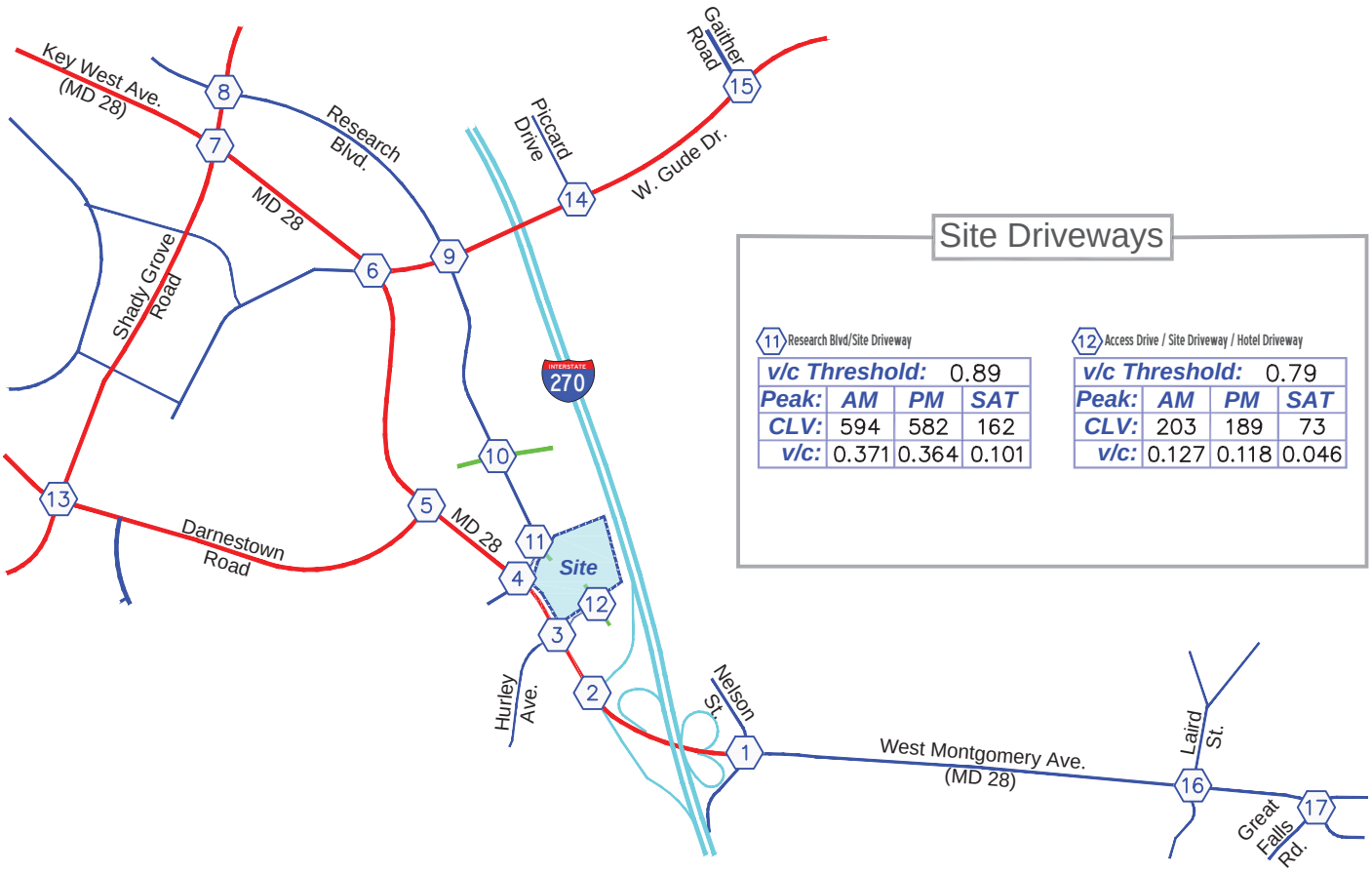

1 W. Montgomery Ave (MD 28)/I-270 NB Ramp/Nelson St

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	920	1337	917
v/c:	0.613	0.891	0.655

2 West Montgomery Ave (MD 28)/I-270 SB Ramps

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1173	1229	720
v/c:	0.711	0.745	0.450

3 West Montgomery Ave (MD 28)/Hurley Ave

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1072	1357	751
v/c:	0.670	0.848	0.501

4 West Montgomery Ave (MD 28)/Research Blvd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	861	1415	617
v/c:	0.574	0.943	0.441

5 West Montgomery Ave (MD 28)/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	783	915	550
v/c:	0.489	0.572	0.367

6 West Montgomery Ave (MD 28)/W. Gude Dr

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	964	895	422
v/c:	0.584	0.542	0.256

7 West Montgomery Ave (MD 28)/Shady Grove Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1002	1216	564
v/c:	0.646	0.785	0.364

8 Research Blvd/Shady Grove Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1235	1289	526
v/c:	0.797	0.832	0.339

9 Research Blvd/West Gude Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1415	1397	530
v/c:	0.943	0.931	0.379

10 Research Blvd/1600 Research Blvd Driveway

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	537	584	136
v/c:	0.358	0.389	0.091

13 Shady Grove Rd/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1366	1171	894
v/c:	0.911	0.781	0.596

14 West Gude Dr/Piccard Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	871	1015	389
v/c:	0.581	0.677	0.259

15 West Gude Dr/Gaither Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	864	992	435
v/c:	0.576	0.661	0.290

16 West Montgomery Ave (MD 28)/Laird St

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1043	1423	742
v/c:	0.632	0.862	0.464

17 West Montgomery Ave (MD 28)/Great Falls Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1295	1379	1199
v/c:	0.809	0.862	0.799

Figure 4-7
2019 Background Future CLV & v/c
Research Row CTR
City of Rockville, Maryland

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COMPONENT 5
TRIP GENERATION FOR THE PROPOSED REDEVELOPMENT

5.1 Overview

This section provides estimates of the number of vehicle trips that would be generated by the proposed new retail and office uses, with reductions for retail pass-by trips, and the resulting number of trips that would be added to the area road network after accounting for the vehicle trips that could be generated by the 105,000 SF of R&D uses that were added under background conditions but would not be present with the redevelopment.

5.2 Trips Generated by the Proposed New Retail and Office Uses

Per the City's CTR Guidelines, the number of vehicle trips that would be generated by the new retail and office uses were estimated utilizing the applicable equations from M-NCPPC's LATR Guidelines with pass-by reductions calculated based on the rates and/or equations published in the Institute of Transportation Engineers' *Trip Generation Handbook (limited to 20 percent per the CTR)*. The results are summarized on Table 5-1 and indicate that, at full buildout and occupancy, the redeveloped site would generate approximately 206 weekday AM, 784 weekday PM, and 894 mid-day peak hour trips on Saturday. When accounting for pass-by reductions applicable to the retail trip generation and subtracting the trips for approved but unutilized uses (105,000 SF of R&D), the redevelopment would result in approximately 70 net additional weekday primary AM, 494 net additional weekday primary PM, and 687 net additional mid-day primary Saturday peak hour trips being added to the area road network.

Table 5-1
Site Trip Generation (Proposed vs. Approved)

Development/Land Use	Rate Source	Size	Units	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	SAT Peak Hour In	SAT Peak Hour Out	SAT Peak Hour Total
Approved Conditions												
Approved (Demolished April 2015)												
Research and Development [1]	ITE (760)	105,000	GFA	113	23	136	21	117	138	17	12	29
Proposed Conditions												
New Buildings/Uses												
General Office [2]	**LATR**	**10,165**	**GFA**	**13**	**2**	**15**	**4**	**19**	**23**	**3**	**2**	**5**
Retail - Primary Trips				*100*	*91*	*191*	*320*	*289*	*609*	*373*	*338*	*711*
Retail - Pass-By Trips [3]	*ITE (820)*	*AM: 0% PM: 20% SAT: 20%*		*-*	*-*	*-*	*76*	*76*	*152*	*89*	*89*	*178*
Retail - Total Trips [4]	***LATR [4]***	***102,535***	***GLA***	***100***	***91***	***191***	***396***	***365***	***761***	***462***	***427***	***889***
Total Primary Trips				*113*	*93*	*206*	*324*	*308*	*632*	*376*	*340*	*716*
Total Pass-By Trips				*-*	*-*	*-*	*76*	*76*	*152*	*89*	*89*	*178*
Total Proposed Site Trips				**113**	**93**	**206**	**400**	**384**	**784**	**465**	**429**	**894**
Net Primary Trips (Proposed vs. 105,000 SF R&D)				-	70	70	303	191	494	359	328	687
Net Pass-By Trips (Proposed vs. 105,000 SF R&D)				-	-	-	76	76	152	89	89	178
Net Total Site Trips (Proposed vs. 105,000 SF R&D)				**-**	**70**	**70**	**379**	**267**	**646**	**448**	**417**	**865**

Notes: (1) Trip generation based on rates and equations in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, *Ninth Edition.*

(2) Trip generation based on rates and equations in the M-NCPPC LATR

(3) See Section 7.1 for additional information. The Pass-By percentages were identified based on guidance provided in ITE's *"Trip Generation Handbook", but were* then limited to 20% per the CTR.

(4) Weekday AM and PM calculations based on the LATR equations for retail uses without a "Major Grocer". ITE equations were used for Saturday calculations.

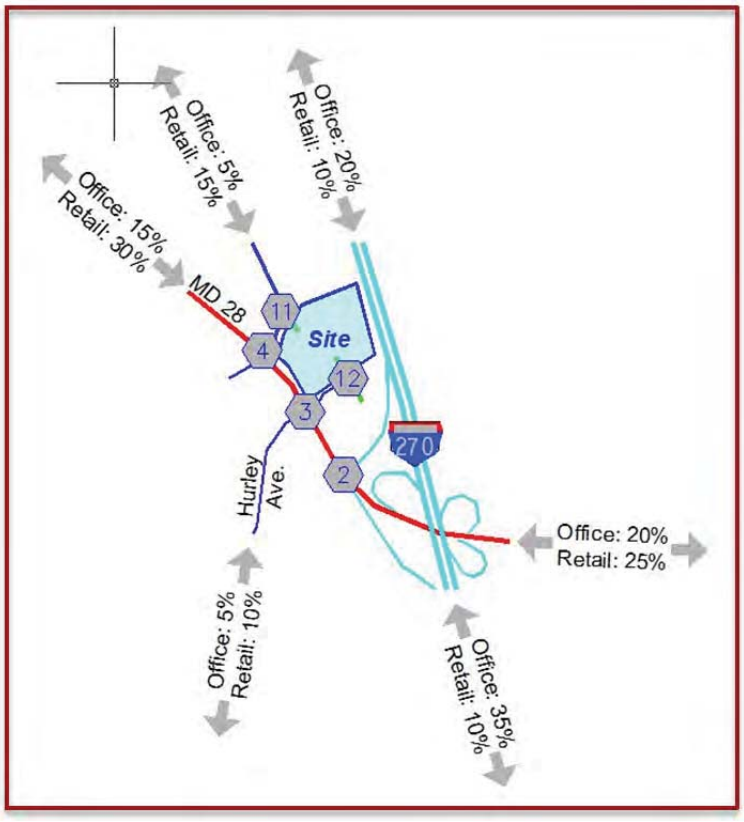
COMPONENT 6
TRIP DISTRIBUTION

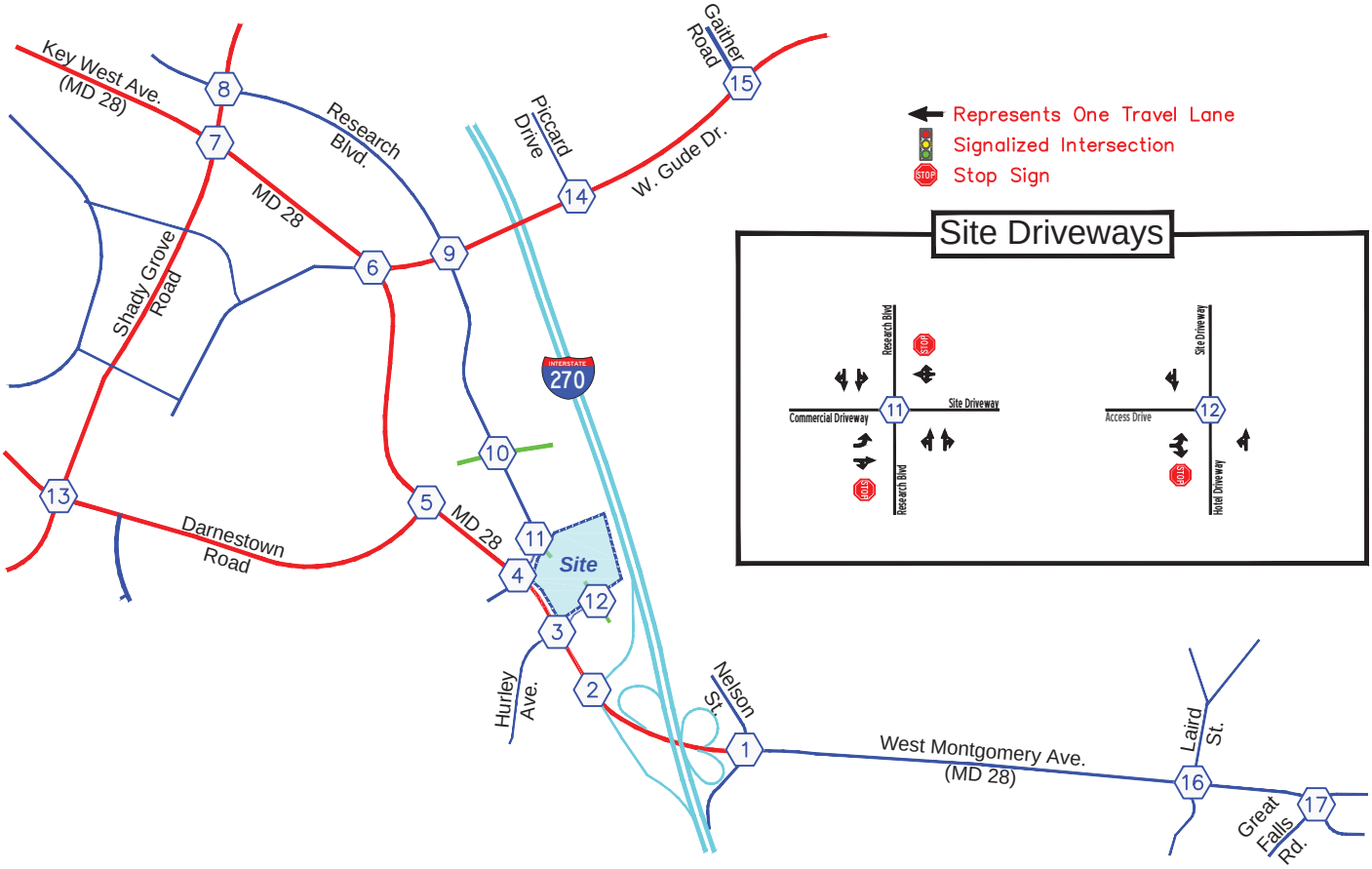
6.1 Trip Distribution

The site trip distributions reflect the approved site trip distributions received from City Staff. The approved distributions for retail and office uses are provided in Appendix A, and detailed distributions for all turning movements are provided in the traffic forecasts provided in the Appendix.

A summary of the global distributions, approved by City Staff, are provided below, and detailed traffic forecasts are provided in the Appendix.

OFFICE/RETAIL DISTRIBUTIONS





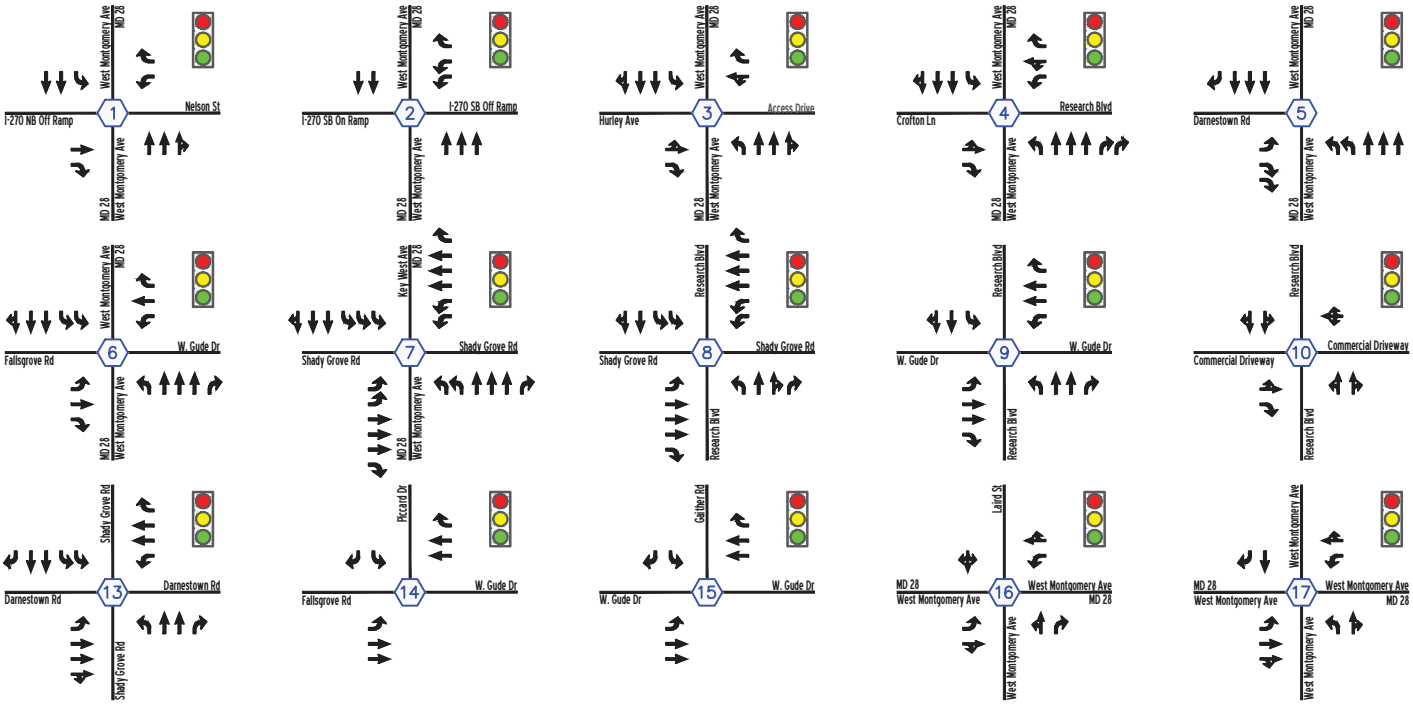


Figure 8-1
Total Future Lane Use and Traffic Controls without Mitigation
Research Row CTR
City of Rockville, Maryland

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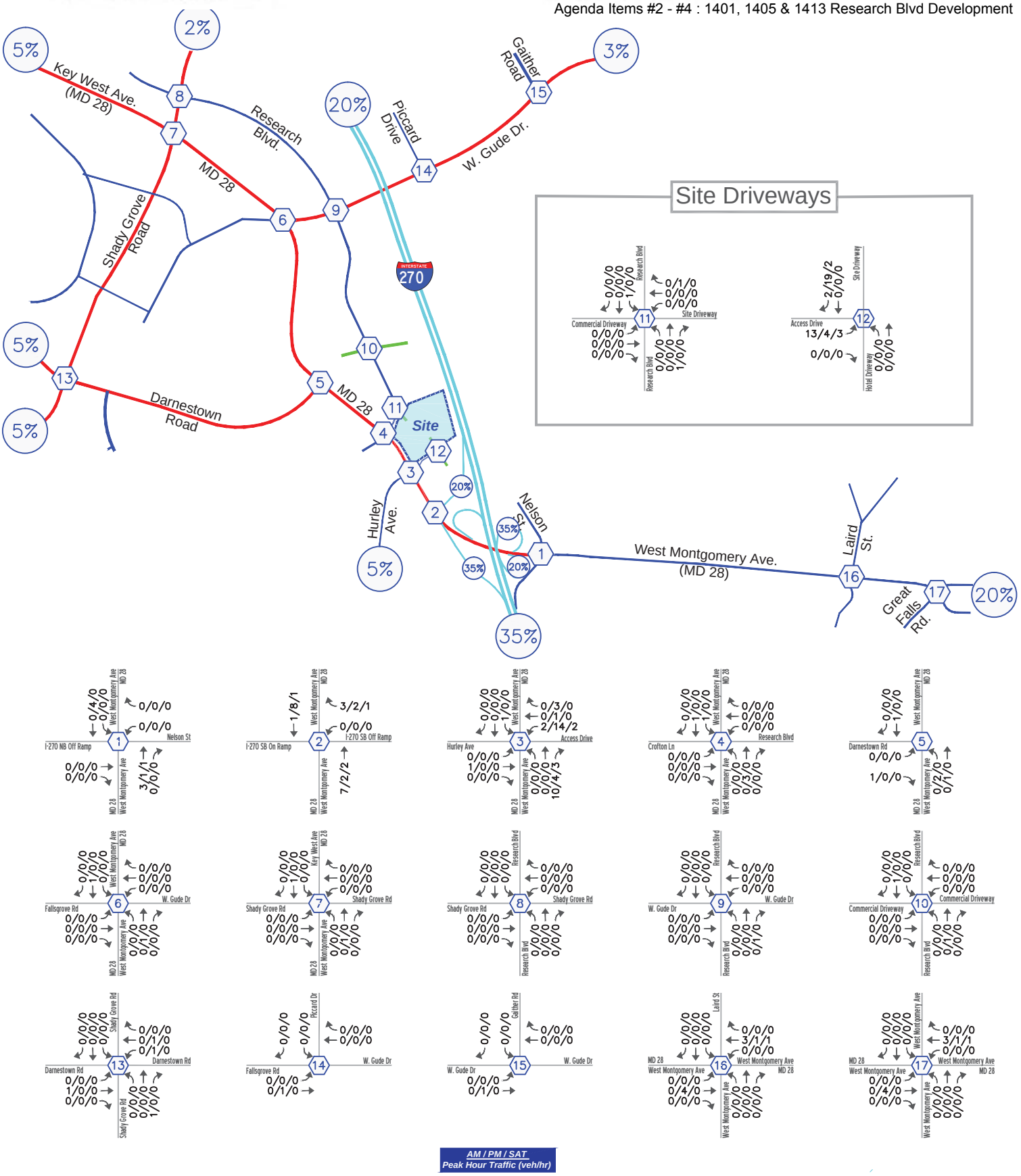

AM / PM / SAT
Peak Hour Traffic (veh/hr)

Figure 8-2(A)
New Site Office Traffic Assignments
Research Row CTR
City of Rockville, Maryland

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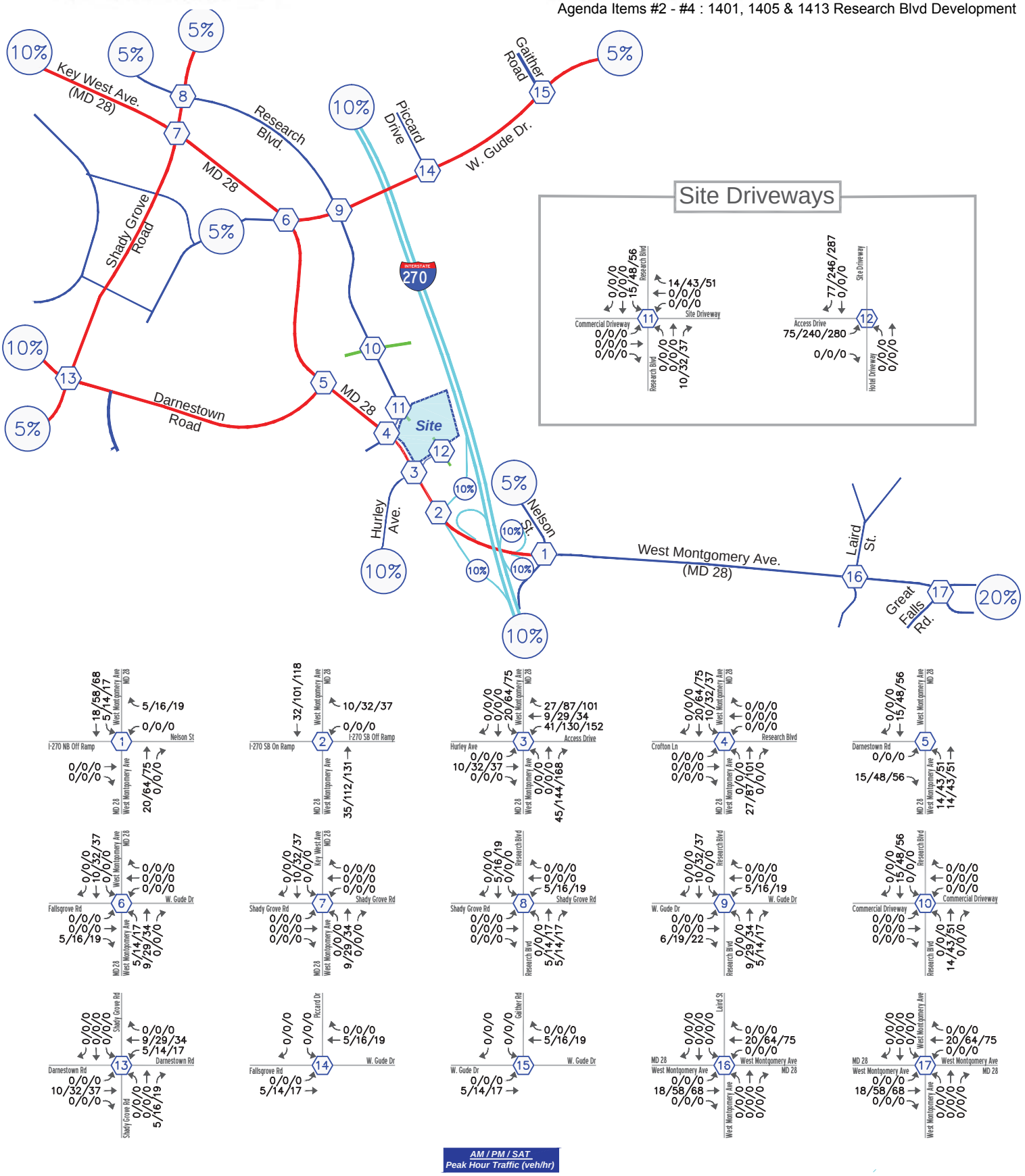

Figure 8-2(B)
New Site Retail Primary Traffic Assignments
Research Row CTR
City of Rockville, Maryland

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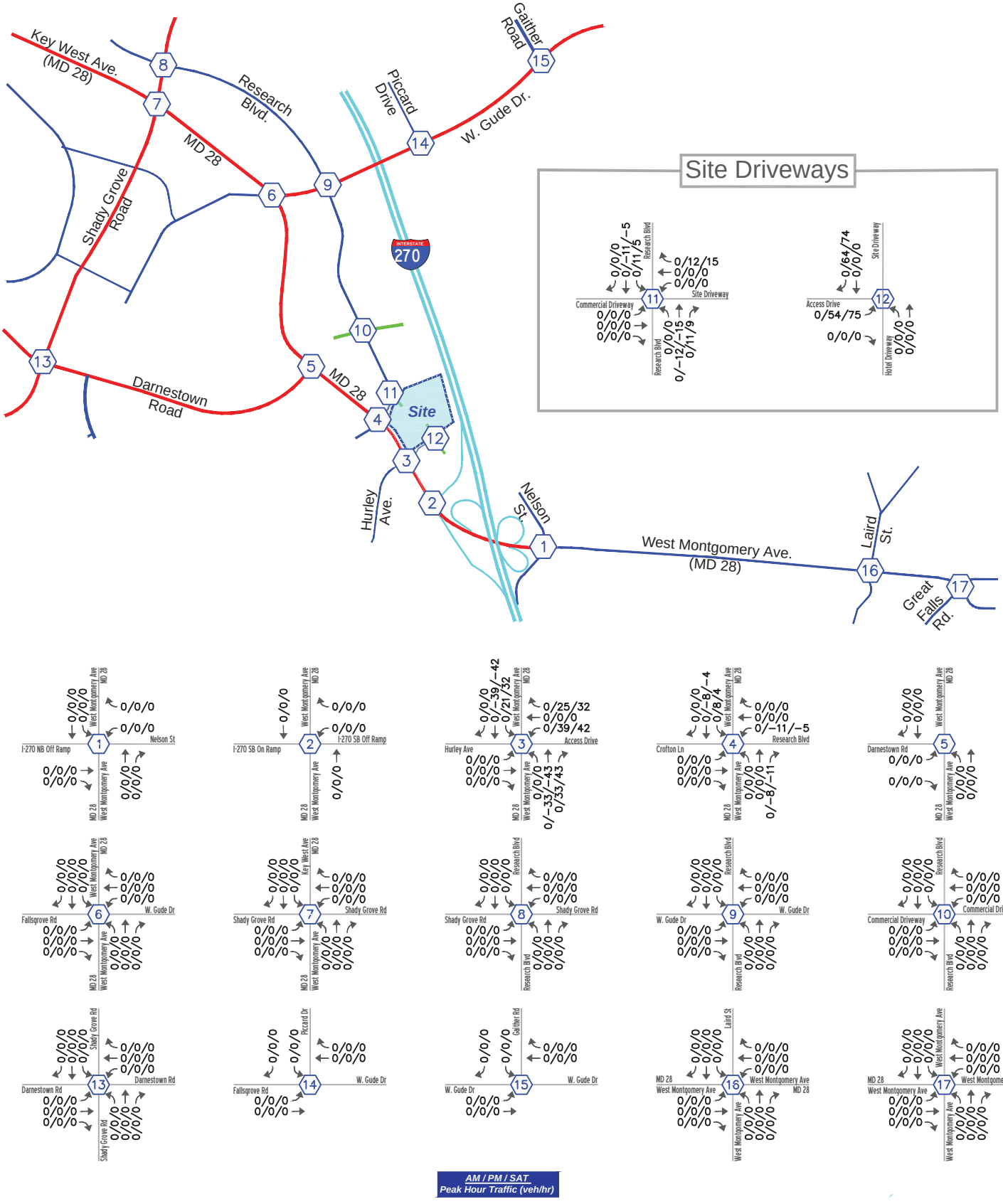

Figure 8-2(C)
New Site Retail Pass-By Traffic Assignments
Research Row CTR
City of Rockville, Maryland

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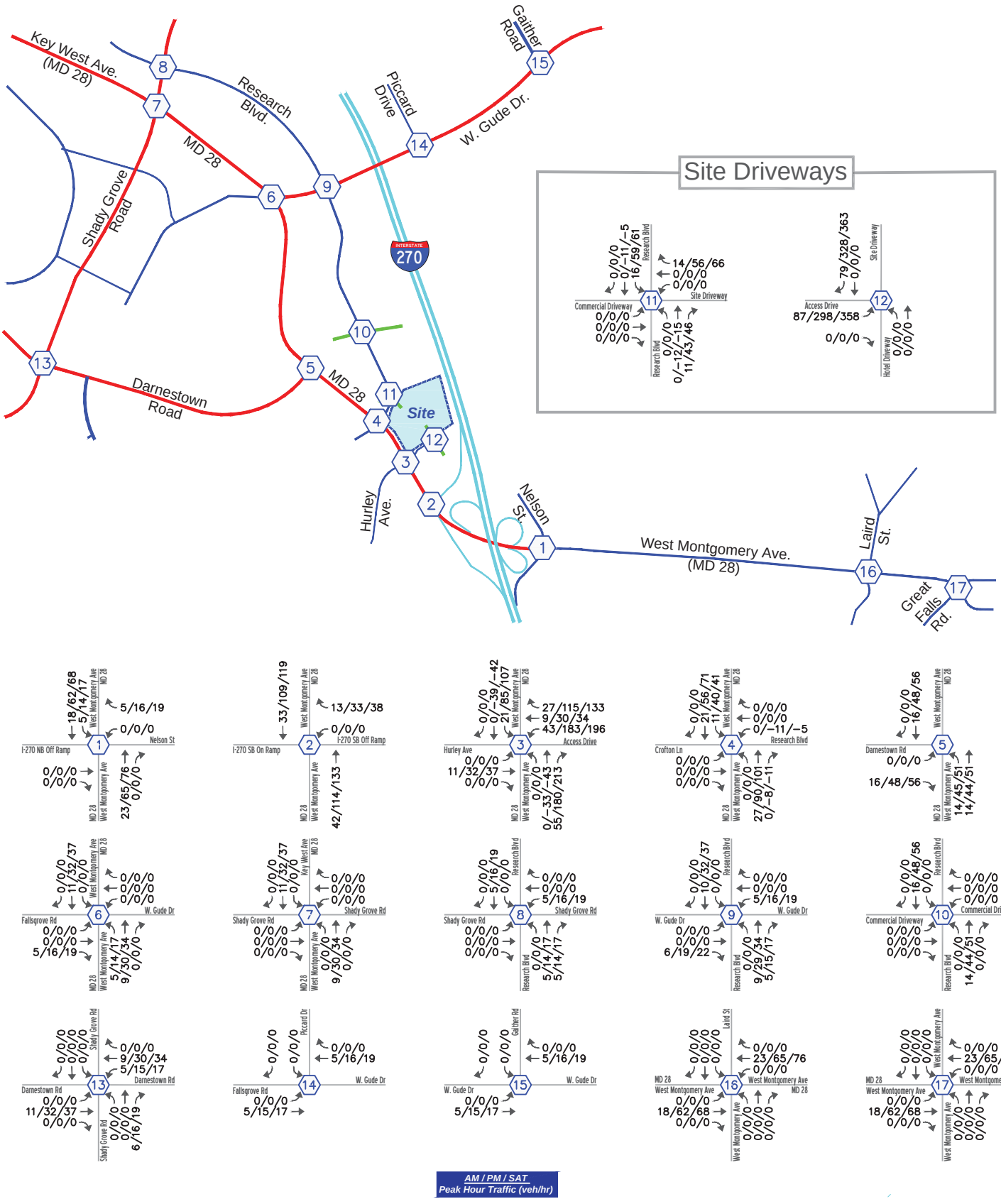

Figure 8-2(D)
Total Traffic Assignments for New Retail and Office Uses (Includes Primary & Pass-By)
Research Row CTR
City of Rockville, Maryland

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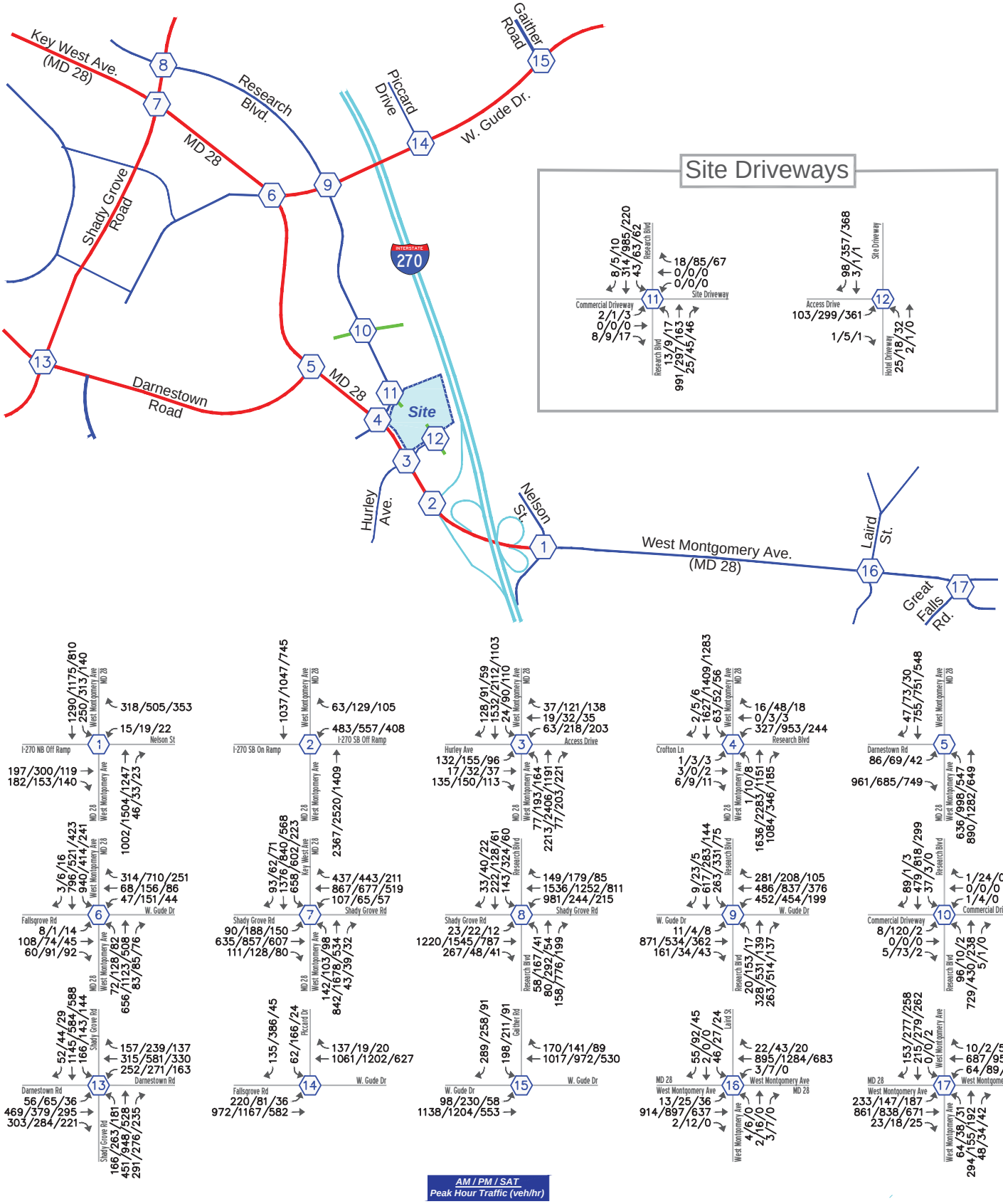

Figure 8-4

2019 Total Future Traffic Forecasts (With Full Buildout of the Proposed Plan)

Research Row CTR

City of Rockville, Maryland

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8.5 2019 Total Future Critical Lane Volume (CLV) Analyses

The 2019 total future peak hour levels of service, critical lane volumes, and volume-to-capacity ratios were evaluated using the City's CLV methodology (Appendix C) based on the total future lane use and traffic controls shown on Figure 8-1 and the 2019 total future traffic projections shown on Figure 8-4.

The level-of-service (LOS) thresholds and intersection capacities and criteria discussed previously (refer to Table 3-1) were utilized in determining the adequacy of the total future CLV estimates. These thresholds and capacities account for the location of each intersection, intersection cycle lengths, and traffic signal phasing.

The results of the total future CLV assessment are summarized in Table 8-1 and Figure 8-5 are discussed below. Detailed CLV worksheets are provided in Appendix H.

A review of the analyses results summarized on Table 8-1 and Figure 8-5 indicate that, consistent with both existing and background future conditions, the Shady Grove Road / Darnestown Road intersection would continue to exceed the acceptable v/c ratio of 0.89 with only a minor increase of 0.002 resulting in a v/c of 0.913 during the AM peak hour.

Consistent with background conditions, the West Montgomery Avenue (MD 28) and West Gude Drive intersections along Research Boulevard are expected to continue to exceed the acceptable v/c ratios of 0.89 during the AM and/or PM peak hours.

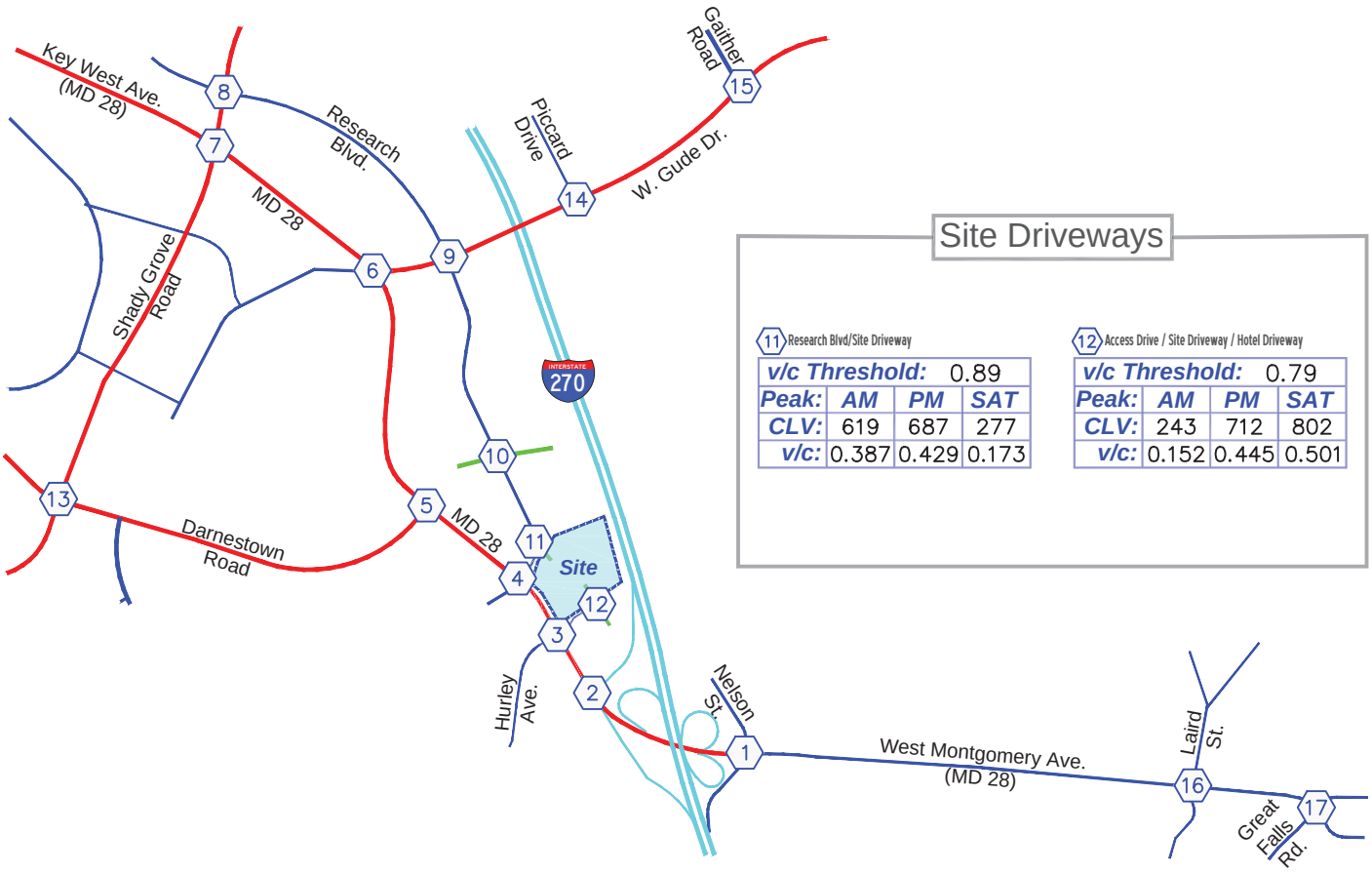
The West Montgomery Avenue (MD 28) intersection at Hurley Avenue is forecasted to exceed its acceptable v/c ratio of 0.89 during the PM peak hour with a v/c ratio of 0.942; however, it is noted that the site impact (difference between background and total future) results in an increase to the v/c of less than 0.10 (less than a full ten percent).

All other intersections would continue to operate at or within the congestion standards under total future conditions during both the weekday AM and PM peak hours and during the mid-day peak hour on Saturday.

The highest CLVs would be realized at the West Gude Drive / Research Boulevard intersection (CLV of 1,422) during the AM peak hour, at the West Montgomery Avenue / Hurley Avenue intersection (CLV of 1,507) during the PM peak hour, and at the West Montgomery Avenue / Great Falls Road intersection during the mid-day on Saturday (CLV of 1,272).

Table 8-1
Total Future Critical Lane Volume (CLV) and Volume-To-Capacity (V/C) Summary

Intersection	Congestion Standard (100% Capacity)	v/c Threshold	Measure of Performance	Background Future (Year 2019)			Total Future (Year 2019)			Development Impact		
				AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
01. W. Montgomery Ave (MD 28) / Nelson Ave	AM 1500 / PM 1500 / SAT 1400	v/c 0.99 (max)	CLV	920	1337	917	927	1376	963	7	39	46
	Signalized Intersection		v/c	0.613	0.891	0.655	0.618	0.917	0.688	0.005	0.026	0.033
			LOS	B	D	B	B	E	B	v/c ≤ 0.99, Site Impact < 10.0% No Intersection Mitigation Required		
02. W. Montgomery Ave (MD 28) / I-270 SB Ramps	AM 1650 / PM 1650 / SAT 1600	v/c 0.99 (max)	CLV	1173	1229	720	1166	1266	766	-7	37	46
	Signalized Intersection		v/c	0.711	0.745	0.45	0.707	0.767	0.479	-0.004	0.022	0.029
			LOS	C	C	A	C	C	A	v/c ≤ 0.99, Site Impact < 10.0% No Intersection Mitigation Required		
03. W. Montgomery Ave (MD 28) / Hurley Ave	AM 1600 / PM 1600 / SAT 1500	v/c 0.89 (max)	CLV	1072	1357	751	1107	**1507**	1009	35	**150**	258
	Signalized Intersection		v/c	0.67	0.848	0.501	0.692	**0.942**	0.673	0.022	**0.094**	**0.172**
			LOS	B	D	A	B	**E**	B	**PM v/c ≥ 0.90 (TF), PM Site Impact = +9.4% Mitigation Required**		
04. W. Montgomery Ave (MD 28) / Research Blvd	AM 1500 / PM 1500 / SAT 1400	v/c 0.89 (max)	CLV	861	**1415**	617	875	**1479**	642	14	**64**	25
	Signalized Intersection		v/c	0.574	**0.943**	0.441	0.583	**0.986**	0.459	0.009	**0.043**	0.018
			LOS	A	**E**	A	A	**E**	A	**PM v/c ≥ 0.90 (BG&TF), PM Site Impact > 1.0% Mitigation Required**		
05. W. Montgomery Ave (MD 28) / Darnestown Rd	AM 1600 / PM 1600 / SAT 1500	v/c 0.89 (max)	CLV	783	915	550	789	953	600	6	38	50
	Signalized Intersection		v/c	0.489	0.572	0.367	0.493	0.596	0.400	0.004	0.024	0.033
			LOS	A	A	A	A	A	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
06. W. Montgomery Ave (MD 28) / Gude Dr	AM 1650 / PM 1650 / SAT 1650	v/c 0.99 (max)	CLV	964	895	422	967	904	434	3	9	12
	Signalized Intersection		v/c	0.584	0.542	0.256	0.586	0.548	0.263	0.002	0.006	0.007
			LOS	A	A	A	A	A	A	v/c ≤ 0.99, Site Impact < 10.0% No Intersection Mitigation Required		
07. W. Montgomery/Key West Ave (MD 28) / Shady Grove Rd	AM 1550 / PM 1550 / SAT 1550	v/c 0.99 (max)	CLV	1002	1216	564	1004	1225	577	2	9	13
	Signalized Intersection		v/c	0.646	0.785	0.364	0.648	0.790	0.372	0.002	0.005	0.008
			LOS	B	C	A	B	C	A	v/c ≤ 0.99, Site Impact < 10.0% No Intersection Mitigation Required		
08. Research Blvd / Shady Grove Rd	AM 1550 / PM 1550 / SAT 1550	v/c 0.89 (max)	CLV	1235	1289	526	1239	1307	550	4	18	24
	Signalized Intersection		v/c	0.797	0.832	0.339	0.799	0.843	0.355	0.002	0.011	0.016
			LOS	C	D	A	C	D	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
09. Research Blvd / Gude Dr	AM 1500 / PM 1500 / SAT 1400	v/c 0.89 (max)	CLV	**1415**	**1397**	530	**1422**	**1427**	568	7	**30**	38
	Signalized Intersection		v/c	**0.943**	**0.931**	0.379	**0.948**	**0.951**	0.406	0.005	**0.020**	0.027
			LOS	**E**	**E**	A	**E**	**E**	A	**AM & PM v/c ≥ 0.90 (BG & TF), PM Site Impact > 1.0% Mitigation Required**		
10. Research Blvd / 1600 Research Driveway	AM 1500 / PM 1500 / SAT 1500	v/c 0.89 (max)	CLV	537	584	136	544	609	165	7	25	29
	Signalized Intersection		v/c	0.358	0.389	0.091	0.363	0.406	0.110	0.005	0.017	0.019
			LOS	A	A	A	A	A	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
11. Research Blvd / Site Driveway	AM 1600 / PM 1600 / SAT 1600	v/c 0.89 (max)	CLV	594	582	162	619	687	277	25	105	115
	Two-Way Stop Control		v/c	0.371	0.364	0.101	0.387	0.429	0.173	0.016	0.065	0.072
			LOS	A	A	A	A	A	A	v/c ≤ 0.89, Site Impact < 10.0% **Mitigation Provided, but Not Required**		
12. Access Drive / Site Driveway	AM 1600 / PM 1600 / SAT 1600	v/c 0.79 (max)	CLV	203	189	73	243	712	802	40	523	729
	Two-Way Stop Control		v/c	0.127	0.118	0.046	0.152	0.445	0.501	0.025	**0.327**	**0.455**
			LOS	A	A	A	A	A	A	**v/c ≤ 0.79, PM & SAT Site Impact > 10.0% Private Road - Mitigation Provided, but Not Required**		
13. Shady Grove Rd / Darnestown Rd	AM 1500 / PM 1500 / SAT 1500	v/c 0.89 (max)	CLV	**1366**	1171	894	**1370**	1181	911	**4**	10	17
	Signalized Intersection		v/c	**0.911**	0.781	0.596	**0.913**	0.787	0.607	**0.002**	0.006	0.011
			LOS	**E**	C	A	**E**	C	B	**AM v/c ≥ 0.90 (BG&TF), AM Site Impact < 10% No Intersection Mitigation Required**		
14. West Gude Dr / Piccard Dr	AM 1500 / PM 1500 / SAT 1500	v/c 0.89 (max)	CLV	871	1015	389	872	1023	398	1	8	9
	Signalized Intersection		v/c	0.581	0.677	0.259	0.581	0.682	0.265	-	0.005	0.006
			LOS	A	B	A	A	B	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
15. West Gude Dr / Gaither Rd	AM 1500 / PM 1500 / SAT 1500	v/c 0.89 (max)	CLV	864	992	435	865	1000	445	1	8	10
	Signalized Intersection		v/c	0.576	0.661	0.29	0.577	0.667	0.297	0.001	0.006	0.007
			LOS	A	B	A	A	B	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
16. W. Montgomery Ave (MD 28) / Laird St	AM 1650 / PM 1650 / SAT 1600	v/c 0.99 (max)	CLV	1043	1423	742	1043	1484	815	-	61	73
	Signalized Intersection		v/c	0.632	0.862	0.464	0.632	0.899	0.509	-	0.037	0.045
			LOS	B	D	A	B	D	A	v/c ≤ 0.89, Site Impact < 10.0% No Intersection Mitigation Required		
17. W. Montgomery Ave (MD 28) / Great Falls Rd	AM 1500 / PM 1600 / SAT 1500	v/c 0.99 (max)	CLV	1295	1379	1199	1295	1440	1272	-	61	73
	Signalized Intersection		v/c	0.809	0.862	0.799	0.809	0.900	0.848	-	0.038	0.049
			LOS	D	D	C	D	E	D	v/c ≤ 0.99, Site Impact < 10.0% No Intersection Mitigation Required		



1 W. Montgomery Ave (MD 28)/I-270 NB Ramp/Nelson St

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	927	1376	963
v/c:	0.618	0.917	0.688

2 West Montgomery Ave (MD 28)/I-270 SB Ramps

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1166	1266	766
v/c:	0.707	0.767	0.479

3 West Montgomery Ave (MD 28)/Hurley Ave

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1107	1507	1009
v/c:	0.692	0.942	0.673

4 West Montgomery Ave (MD 28)/Research Blvd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	875	1479	642
v/c:	0.583	0.986	0.459

5 West Montgomery Ave (MD 28)/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	789	953	600
v/c:	0.493	0.596	0.400

6 West Montgomery Ave (MD 28)/W. Gude Dr

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	967	904	434
v/c:	0.586	0.548	0.263

7 West Montgomery Ave (MD 28)/Shady Grove Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1004	1225	577
v/c:	0.648	0.790	0.372

8 Research Blvd/Shady Grove Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1239	1307	550
v/c:	0.799	0.843	0.355

9 Research Blvd/West Gude Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1422	1427	568
v/c:	0.948	0.951	0.406

10 Research Blvd/1600 Research Blvd Driveway

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	544	609	165
v/c:	0.363	0.406	0.110

13 Shady Grove Rd/Darnestown Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1370	1181	911
v/c:	0.913	0.787	0.607

14 West Gude Dr/Piccard Dr

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	872	1023	398
v/c:	0.581	0.682	0.265

15 West Gude Dr/Gaither Rd

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	865	1000	445
v/c:	0.577	0.667	0.297

16 West Montgomery Ave (MD 28)/Laird St

v/c Threshold:	0.89		
Peak:	AM	PM	SAT
CLV:	1043	1484	815
v/c:	0.632	0.899	0.509

17 West Montgomery Ave (MD 28)/Great Falls Rd

v/c Threshold:	0.99		
Peak:	AM	PM	SAT
CLV:	1295	1440	1272
v/c:	0.809	0.900	0.848

Figure 8-5
2019 Total Future CLV & v/c
Research Row CTR
City of Rockville, Maryland

NORTH

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The following intersection is not subject to mitigation requirements as it includes two private access roads. However, for informational purposes, it would operate at or within the congestion standards under total future conditions with the proposed redevelopment, and the CLV analyses indicate that the site impact at the intersections would result in a volume-to-capacity (v/c) increase of 10% or greater during one or more of the study peak hours:

- **Intersection 12: Site Driveway / Hurley Avenue**
  - v/c Threshold: 0.79 (threshold exceeded if v/c reaches 0.80).
  - 0.327 increase in v/c during the weekday PM peak hour.
  - 0.455 increase in v/c during the mid-day Saturday peak hour.

The following intersections would operate beyond the acceptable volume-to-capacity thresholds under both background and total future conditions. Per the CTR, mitigation is required where the site impact results in a v/c increase of 0.01 (a full one percent) or greater between background and total future conditions.

- **Intersection 04: West Montgomery Avenue (MD 28) / Research Boulevard**
  - v/c Threshold: 0.89 (threshold exceeded if v/c reaches 0.90).
  - During the PM peak hour, 0.943 v/c under background future conditions.
  - During the PM peak hour, 0.986 v/c under total future conditions with the proposed redevelopment.
  - Site impact of 0.043 (4.3%) increase in v/c during the weekday PM peak hour.
  - **Mitigation must be provided since site impact is 1.0 percent or greater.**
- **Intersection 09: West Gude Drive / Research Boulevard**
  - v/c Threshold: 0.89 (threshold exceeded if v/c reaches 0.90).
  - During the PM peak hour, 0.931 v/c under background future conditions.
  - During the PM peak hour, 0.951 v/c under total future conditions with the proposed redevelopment.
  - Site impact of 0.020 (2.0%) increase in v/c during the weekday PM peak hour.
  - **Mitigation must be provided since site impact is 1.0 percent or greater.**
- **Intersection 13: Darnestown Road / Shady Grove Road**
  - v/c Threshold: 0.89 (threshold exceeded if v/c reaches 0.90).
  - During the AM peak hour, 0.911 v/c under background future conditions.
  - During the AM peak hour, 0.913 v/c under total future conditions with the proposed redevelopment.
  - Site impact of 0.002 (0.2%) increase in v/c during the weekday AM peak hour.
  - **No mitigation required since the impact is less than 1.0 percent.**

The following intersection would operate below the acceptable volume-to-capacity threshold under background conditions but beyond the acceptable threshold under total future conditions. Per the CTR, mitigation is required if the site impact results in a v/c increase of 0.10 (a full ten percent) or greater between background and total future conditions.

- **Intersection 03: W. Montgomery Ave. (MD 28)/Hurley Ave/Access Drive.**
  - 0.89 (threshold exceeded if v/c reaches 0.90).
  - During the PM peak hour, 0.848 v/c under background future conditions.
  - During the PM peak hour, 0.942 v/c under total future conditions with the proposed redevelopment.
  - 0.094 (9.4%) increase in v/c during the weekday PM peak hour.
  - **No mitigation required since the impact is less than 10.0 percent.**

11.2 Proposed Mitigation

The Applicant proposes to provide the following mitigation in order to adequately mitigate the traffic related impacts that would result from the proposed redevelopment, and the resulting lane use and traffic controls, including these improvements, is depicted on Figure 11-1:

- **Intersection 04: West Montgomery Avenue (MD 28) / Research Boulevard**
  - The Applicant proposes to reconfigure the Research Boulevard approach at the intersection in order to convert the existing shared left-through lane into a dedicated left-turn lane. The existing right-turn lane is proposed to be converted into a shared left-through-right lane.
  - As a result of the reconfiguration described above, the Research Boulevard approach would provide three (3) lanes to facilitate vehicles turning left onto West Montgomery Avenue (MD 28).
  - Three (3) receiving lanes are currently present on West Montgomery Avenue (MD 28) to accommodate the proposed reconfiguration.
  - In general, the proposed improvement would require a signal modification through cooperation with the Maryland State Highway Administration (SHA), new striping, possible wayfinding signage, and other accompanying improvements.
  - The right-turn and through-movement traffic volumes account for only a minor portion (Approximately 5 percent) of the Research Boulevard approach traffic as shown below. Given the heavy left-turn volume when compared to the other movements, the priority should be given to the left-turn movement.

Traffic Forecasts (Total Future 2019)					
Peak Hour		Research Boulevard Approach			
		Right	Through	Left	Total
Weekday AM	Vehicles/Hour	16	0	327	343
	% of Approach	4.7%	0.0%	95.3%	
Weekday PM	Vehicles/Hour	48	3	953	1004
	% of Approach	4.8%	0.3%	94.9%	
Saturday Mid-Day	Vehicles/Hour	18	3	244	265
	% of Approach	6.8%	1.1%	92.1%	

- **Intersection 09: West Gude Drive / Research Boulevard**
  - The Applicant proposes to restripe the southbound Research Boulevard approach at the intersection in order to convert the currently striped out lane into a second left turn lane.

11.3 Additional Proposed Improvements

In addition to the required mitigation outlined in Section 11.2, the following additional improvements are proposed to be provided by the Applicant in order to further improve circulation, traffic operations, and both vehicular and pedestrian access in and around the site. The Applicant will work with the City and SHA to provide these improvements; however, it is noted that these improvements are not required to be provided in order to meet any of the mitigation requirements set forth in the City's CTR Guidelines. The resulting lane use and traffic controls, including these improvements, are depicted on Figure 11-1:

PROPOSED ADDITIONAL INTERSECTION IMPROVEMENTS

- **Intersection 03: W. Montgomery Ave. (MD 28)/Access Drive/Hurley Ave.**
  - The Access Drive is proposed to be restriped to the north of the intersection so that two (2) approach lanes will be available with adequate queue storage capacity. While there are separate right and left turn lanes on the Access Drive under existing conditions, the second lane only extends approximately 50 feet before tapering back to a single lane. The Access Drive approach would likely realize a significant improvement in operations with two egress lanes along the full length of the roadway and the lane use adjustment described below.
  - At the intersection, the lane use is proposed to be reconfigured to provide one (1) shared through-right lane and one (1) left turn lane.
  - In general, the adjusted lane use would require a signal modification through cooperation with the Maryland State Highway Administration (SHA), new striping, potential pedestrian crossing improvements, and other accompanying improvements.
  - Since this approach is not the critical movement, the CLV and v/c would not change; however, traffic operations would be improved with the reduced queuing and more efficient lane use proposed.
  - In response to SHA comments on the change in lane use proposed, a more in depth capacity analyses was performed using the Highway Capacity Manual methodology utilizing the Synchro (Version 9) traffic analysis software. A summary of the results from the HCM analysis are provided on Table 11-1 and detailed reports are provided in the Appendix. The results of these analyses indicate that the proposed improvements would provide significant

improvements for the side-street approaches of the Access Drive and Hurley Avenue. In addition to reduced average vehicle delays for the side street movements, the side street queues would be reduced as well. The proposed lane configuration of one (1) shared through-right lane and one (1) left turn lane on the Access Drive approach would result in overall better side street operations when compared to the existing lane use that includes a shared through-left land and a right turn lane.

- **Intersection 11: Site Driveway / Research Boulevard**
  - The Applicant is proposing to provide improvements along the site driveway on Research Boulevard that would result in separate left and right turn lanes at the intersection with Research Boulevard. This will reduce the potential for queuing on the driveway approach in the event that a left turning vehicle must wait for an available gap on Research Boulevard to exit the property.
  - The Applicant also proposes that the left turn movement from the driveway onto Research Boulevard be restricted during the PM peak period due to the heavy traffic and queuing along Research Boulevard approaching MD 28 that occurs during the typical afternoon commuter peak period.

- **Intersection 12: Site Driveway / Access Drive**
  - The Access Drive is proposed to be restriped between the site driveway and West Montgomery Avenue (MD 28) to provide two (2) lanes serving egress traffic. While this will not have a direct impact on the CLV or the v/c ratio, this intersection is expected to operate at level-of-service "A" and is not subject to mitigation requirements.

Table 11-1
Critical Lane Volume Analyses Summary for Intersection Improvements

Congestion Standard (Capacity)	v/c Threshold	Measure of Performance	Background AM	Background PM	Background SAT	Total Future AM	Total Future PM	Total Future SAT	Development Impact AM	Development Impact PM	Development Impact SAT	Proposed Mitigation	Total Future with Mitigation AM	Total Future with Mitigation PM	Total Future with Mitigation SAT
03. W. Montgomery Ave (MD 28) / Hurley Ave															
AM 1600	v/c	CLV	1072	1357	751	1107	**1507**	1009	35	**150**	258	Access Drive approach at MD 28 restriped to provide one (1) left turn lane and one (1) shared through-right lane. Leading left-turn phase added. Two lanes provided on the full Access Drive section north of MD 28	1105	1507	1009
PM 1600	0.89	v/c	0.670	0.848	0.501	0.692	**0.942**	0.673	0.022	**0.094**	0.172		0.691	0.942	0.673
SAT 1500	(max)	LOS	B	D	A	B	**E**	B	**PM v/c ≥ 0.90 (TF), PM Site Impact = +9.4% Mitigation Required**				B	E	B
Signalized Intersection															
04. W. Montgomery Ave (MD 28) / Research Blvd															
AM 1500	v/c	CLV	861	**1415**	617	875	**1479**	642	14	**64**	25	Work with the Maryland State Highway Administration (SHA) to restripe the Research Boulevard Approach to Provide two (2) left-turn lanes and one (1) shared left-through-right lane. Upgrade traffic signal equipment as needed.	816	1307	600
PM 1500	0.89	v/c	0.574	**0.943**	0.441	0.583	**0.986**	0.459	0.009	**0.043**	0.018		0.544	0.871	0.429
SAT 1400	(max)	LOS	A	**E**	A	A	**E**	A	**PM v/c ≥ 0.90 (BG&TF), PM Site Impact > 1.0% Mitigation Required**				A	D	A
Signalized Intersection															
09. Research Blvd / Gude Dr															
AM 1500	v/c	CLV	1415	**1397**	530	1422	**1427**	568	7	**30**	38	Restripe the southbound Research Blvd approach to provide a 2nd left-turn lane onto Gude Drive within the striped-out section of existing pavement. This improvement was previously planned by the 4 Research Place development (approval recently expired).	1313	1262	530
PM 1500	0.89	v/c	0.943	**0.931**	0.379	0.948	**0.951**	0.406	0.005	**0.020**	0.027		0.875	0.841	0.379
SAT 1400	(max)	LOS	E	**E**	A	E	**E**	A	**AM & PM v/c ≥ 0.90 (BG & TF), PM Site Impact > 1.0% Mitigation Required**				D	D	A
Signalized Intersection															
11. Research Blvd / Site Driveway															
AM 1600	v/c	CLV	594	582	162	619	687	277	25	105	115	Provide separate left turn lane on the site driveway, and restrict left-turn movement from the driveway onto Research Boulevard during the PM peak period. Provide striped pedestrian crossing on driveway approach.	619	687	277
PM 1600	0.89	v/c	0.371	0.364	0.101	0.387	0.429	0.173	0.016	0.065	0.072		0.387	0.429	0.173
SAT 1600	(max)	LOS	A	A	A	A	A	A	v/c ≤ 0.89, Site Impact < 10.0% **Mitigation Provided, but Not Required**				A	A	A
Two-Way Stop Control															
12. Access Drive / Site Driveway															
AM 1600	v/c	CLV	203	189	73	243	712	802	40	**523**	**729**	Provide pedestrian sidewalk connection to the adjacent Hotel property to the east. Sidewalk to run along the north side of the "T" intersection. Second receiving lane added on the Access Drive extending from the MD 28 intersection.	243	712	802
PM 1600	0.79	v/c	0.127	0.118	0.046	0.152	0.445	0.501	0.025	**0.327**	**0.455**		0.152	0.445	0.501
SAT 1600	(max)	LOS	A	A	A	A	A	A	**v/c ≤ 0.79, PM & SAT Site Impact > 10.0% Private Road - Mitigation Provided, but Not Required**				A	A	A
Two-Way Stop Control															

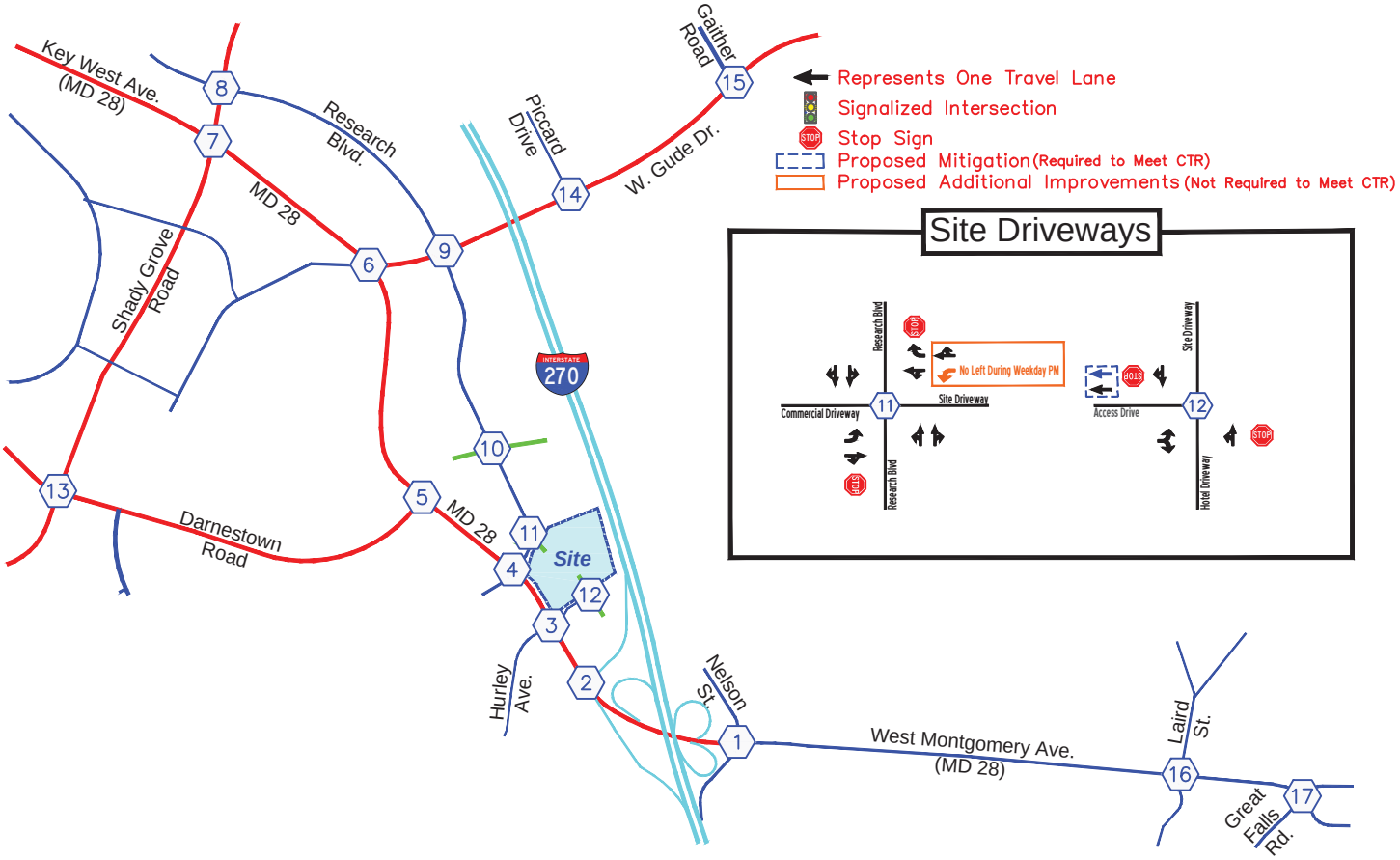
HCM Capacity Analyses (Synchro, Version 9)

Study Intersections	Background Conditions: Lane Use	Movement	PM LOS (HCM)	PM Delay (s/veh)	PM Queue (ft)	Total Future Conditions: Lane Use	Movement	PM LOS (HCM)	PM Delay (s/veh)	PM Queue (ft)	With Proposed Lane Use (Timings Updated, No Change in Cycle Length)	Movement	PM LOS (HCM)	PM Delay (s/veh)	PM Queue (ft)
03. W. Montgomery Ave (MD 28) / Hurley Ave	Existing Lane Use and Traffic Signal Timings	EB LT	E	78.3	#239	Existing Lane Use and Traffic Signal Timings	EB LT	F	345.2	#377	With Proposed Lane Use (Timings Updated, No Change in Cycle Length)	EB LT	F	106.4	#313
		EBR	C	31.2	117		EBR	C	29.4	117		EBR	C	34.3	74
		EB	**E**	**55.2**			**EB**	**F**	**204.5**			**EB**	**E**	**74.3**	
		WB LT	E	69.3	#205		WB LT	F	300.6	#465		WBL	E	70.6	#296
		WBR	D	40.0	0		WBR	D	40.0	86		WB TR	C	34.2	105
		WB	**E**	**64.8**			**WB**	**F**	**215.4**			**WB**	**E**	**55.5**	
		NBL	D	51.7	m155		NBL	D	49.8	m144		NBL	F	81.3	m#215
		NB TR	A	5.1	252		NBT	A	7.6	321		NBT	E	59.4	#971
		NB	**A**	**8.5**			**NB**	**B**	**10.5**			**NB**	**E**	**60.9**	
		SBL	B	13.0	m4		SBL	F	329.9	m#168		SBL	D	48.3	m#71
		SB TR	C	24.7	#791		SBT	C	26.8	#767		SBT	D	42.8	#795
		SB	**C**	**24.6**			**SB**	**D**	**38.7**			**SB**	**D**	**43.0**	
		Ovr	**B**	**19.5**			**Ovr**	**D**	**46.0**			**Ovr**	**D**	**54.3**	

Proposed Improvements

- *Provide two (2) lanes along the full length of Hurley Avenue between MD 28 and the Site Driveway.*
- *Adjust the lane use on the Hurley Avenue approach at the intersection from the existing right turn lane and shared through-left lane to provide one (1) left turn lane and one (1) shared through-right lane.*
- *Provide a leading left turn phase to clear out the queue on Hurley Avenue leaving the site.*
- *Provide a protected left turn phase entering the site off of MD 28.*

Notes : (1) Synchro (Version 9) used to calculate HCM Level of Service (LOS) and delay (in sec/veh).



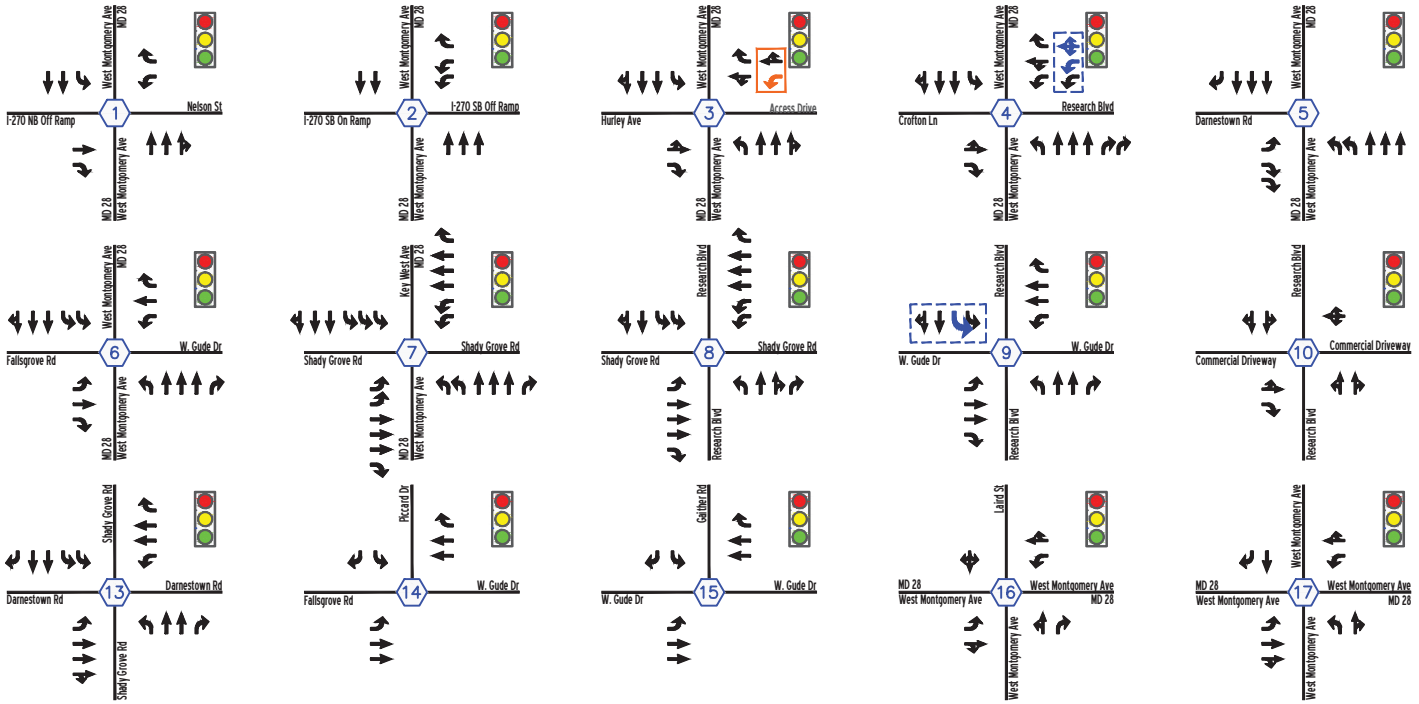


Figure 11-1
Total Future Lane Use and Traffic Controls with Mitigation & Additional Improvements
Research Row CTR
City of Rockville, Maryland

NORTH

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PROPOSED ADDITIONAL PEDESTRIAN IMPROVEMENTS

- A new interparcel sidewalk connection is proposed to be constructed that would connect the new and expansive pedestrian network within the Research Row development with the adjacent hotel property to the east. There are no current pedestrian interparcel connections in place between these properties.
- The Applicant is proposing to provide a pedestrian inter-parcel connection with the adjacent office development to the north of the site. No inter-parcel connections are provided under existing conditions. With the addition of retail uses on-site, the proposed inter-parcel connection will provide convenient access between the two properties for office users that will likely utilize many of the retail offerings throughout the day. This will likely result in some reduction in vehicular site traffic originating from the adjacent office development and/or other neighboring developments that would realize more convenient pedestrian access as a result of the improvement.
- The Applicant is proposing to relocate the existing (non ADA compliant) pedestrian ramp which is currently located along MD 28 near the Research Boulevard intersection. The ramp will be reconstructed to meet current ADA standards, and the ramp will be relocated further to the southeast to tie into the public sidewalk near the bus stop adjacent to the Access Drive. The reconstructed pedestrian ramp will tie into the improved internal pedestrian facilities within the site and will also provide a new and more direct route for pedestrians and bicyclists traveling to and from the north through the site.

COMPONENT 12
SUMMARY

Based on a review of the available traffic information and the future traffic forecasts, the following summarizes the results and conclusions of this Comprehensive Transportation Review (CTR):

1. Sixteen of the seventeen study intersections currently operate at or within the acceptable thresholds during the weekday and Saturday peak hours studied. The Shady Grove Road / Darnestown Road intersection currently exceeds the acceptable v/c ratio of 0.89 during the AM peak hour; however, the intersection operates within the acceptable v/c ratio during the remaining peak hours studied.
2. The Shady Grove Road / Darnestown Road intersection would continue to exceed the acceptable v/c ratio of 0.89 during the AM peak hour, and the volume-to-capacity ratio at the MD 28 and West Gude Drive intersections along Research Boulevard would increase beyond the acceptable thresholds of 0.89 under background conditions during the AM and/or PM peak hours. All other study intersections would continue to operate at or within the acceptable thresholds during each peak hour studied under background conditions that include planned road improvements, additional traffic added to the road network by pipeline development, the regional growth in through traffic that would be realized along MD 28, and the potential site trips from the currently unutilized 105,000 SF of approved R&D uses.
3. The proposed redevelopment of the site, including construction of 102,535 SF of retail uses (before pass-by trip reduction) and the addition of 10,165 SF of new office space, would result in approximately 70 additional weekday AM, 646 additional weekday PM, and 865 additional mid-day Saturday peak hour trips being generated by the site under total future conditions in year 2019 when compared to the trip generation potential for the 105,000 SF of approved R&D uses that were recently demolished in April of 2015 in anticipation of the proposed redevelopment.
4. Consistent with both existing and background future conditions, the Shady Grove Road / Darnestown Road intersection would continue to exceed the acceptable v/c ratio of 0.89 during the AM peak hour; however, the site impact at this location is less than 1.0 percent (0.010) and no mitigation is required.
5. Consistent with background conditions, the West Montgomery (MD 28) and West Gude Drive intersections along Research Boulevard would continue to operate beyond the acceptable v/c thresholds of 0.89 during the AM and/or PM peak hours, and the site impact is projected to be greater than 1.0 percent at both locations. Therefore, mitigation is required at both of these study intersections as a result of the proposed site redevelopment.
6. The West Montgomery Avenue (MD 28) intersection at Hurley Avenue could potentially realize increases in turning movement volumes during the PM peak hour as a result of the proposed redevelopment that would result in v/c ratios above the acceptable threshold of 0.89. Since the projected site impact would result in a v/c increase of less than ten percent between background and total future conditions, no mitigation is required per the CTR Guidelines.
7. All other study intersections would continue to operate at or within the congestion standards during each peak hour studied under 2019 total future conditions that include the additional site traffic that would be added throughout the area road network as a result of the proposed redevelopment.

8. Mitigation measures are proposed by the Applicant at each of the two (2) intersections described above where mitigation is required per the CTR Guidelines.
9. At the MD 28 / Research Boulevard intersection, the Applicant is proposing to reconfigure the Research Boulevard approach, currently consisting of one (1) left turn lane, one (1) shared through-left lane, and one (1) right turn lane, to operate with two (2) left turn lanes and one (1) shared left-through-right lane. This improvement would result in three (3) lanes to accommodate the heavy future left turn volume forecasted during the PM peak period. The Applicant will work with SHA to develop and implement these improvements and the corresponding traffic signal modifications.
10. At the West Gude Drive / Research Boulevard intersection, the Applicant is proposing to restripe the southbound Research Boulevard approach to convert the currently striped out section of pavement into a second left turn lane. This improvement was previously planned to be completed by the 4 Research Place development; however, the approvals for that development have recently expired. The Applicant will work with the City of Rockville to develop and implement this improvement and the corresponding traffic signal modifications.
11. The proposed mitigation described above (detailed in Section 11.2) would provide adequate mitigation of the projected site impact at the study intersections based on the mitigation requirements set forth in the City's CTR Guidelines.
12. In addition to the proposed mitigation measures needed to meet the mitigation requirements set forth in the CTR Guidelines, the Applicant is proposing to construct the following additional improvements. While these improvements are not required per the CTR, the Applicant proposes to work with the City and SHA to provide these improvements in order to improve circulation, traffic operations, and both vehicular and pedestrian access in and around the site.,

    - *Provide a new inter-parcel pedestrian connection to the office development to the north.*
    - *Provide a new inter-parcel pedestrian connection to the hotel property to the east.*
    - *Provide a separate left turn lane on the site driveway approaching Research Boulevard and restrict the left turn movement during the weekday afternoon commuter peak period due to the heavy traffic on Research Boulevard.*
    - *Reconstruct and relocate the existing (non ADA compliant) pedestrian ramp along MD 28. The new ramp will meet current ADA standards and will tie into the sidewalk closer to the existing bus stop located adjacent to the Access Drive intersection.*
    - *The Applicant proposes to reconfigure the entire segment of the Access Drive between MD 28 and the site driveway to provide two (2) outbound lanes leading to the MD 28 intersection. At the MD 28 intersection, the Access Drive approach would be restriped to provide a separate left turn lane with a leading left turn phase and a shared through-right lane. The traffic signal will also be updated to provide a protected left turn movement from MD 28 onto the Access Drive to match the opposing protected left turn phase that was recently implemented at the intersection. As shown in Section 11 of this report, the improvements along the Access Drive and at the intersection would provide significant improvements in side street operations while maintaining adequate mainline levels of service.*

13. The proposed additional improvements described above (detailed in Section 11.3) would provide noticeable improvements to both vehicular and pedestrian operations in and around the site.
14. A Transportation Improvement Fee is required based on the baseline trip generation estimates detailed in Sections 1 and Section 11 of this report.

Questions regarding this document should be directed to Wells + Associates.

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CITY OF ROCKVILLE

BOARDS AND COMMISSIONS

♦

NEW MEMBER TRAINING AND ORIENTATION MATERIALS

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TRAFFIC AND TRANSPORTATION COMMISSION

City of Rockville
Traffic and Transportation Commission

ORIENTATION AND TRAINING MATERIALS FOR NEW MEMBERS

Purpose of the Traffic and Transportation Commission

The Traffic and Transportation Commission advises the Mayor and Council, the Planning Commission, the City Manager, and City staff in matters relating to transportation. As cited in the resolution creating it, the Commission concerns itself with "the establishment of a sound balance of transportation in the City so that the movement of people and goods becomes safe, convenient, and beneficial to all concerned."

Among the Commission's functions are:

- Encouraging diversity in transportation and integration between modes to help reduce dependence on single-occupant vehicle travel.
- Recommending and reviewing transportation projects and programs.
- Assisting the Mayor and Council in mobilizing support for transportation projects of benefit to the City, including at locations not under City jurisdiction.
- Development of policies for the application of traffic control devices supplementary to the Manual on Uniform Traffic Control Devices.
- Development of policies for neighborhood traffic control, including speed control and volume reduction.
- Development of policies to reduce and manage traffic congestion and to enhance pedestrian and bicycle safety.
- Review of the transportation-related aspects of proposed site plans, subdivisions, zoning changes, annexations, etc.
- Review of transportation-related modifications to the Master Plan and Neighborhood Plans, and related oversight of the City's functional classification of streets.
- Review of proposed modifications of the Rockville City Code relating to Streets (Chapter 21), Traffic (Chapter 23), and aspects of the Zoning Ordinance (Chapter 25) related to transportation and parking.
- Oversight of bus and rapid transit and shuttle bus planning within Rockville.
- Development and review of parking policies and standards, both on-street and off-street.
- Development and review of pedestrian policies and programs.
- Development and review of bicycle transportation policies and programs.

- Encouraging coordination between transportation engineering, enforcement, and education.

Authority and Focus

The Traffic and Transportation Commission has no legislative or executive authority and its recommendations are advisory only. The functions under the Commission's purview - as described above - are not exclusive to the Commission but may also be exercised by certain other boards and commissions as well as by City staff.

The Commission's emphasis is typically on policy, broad strategy, and general oversight rather than on details. Outside of regular Commission business, members are welcome to bring location-specific requests, suggestions, and complaints to the attention of the staff liaison.

Members' General Responsibilities

The most fundamental and important responsibility of each Commission member is to regularly attend and participate in the monthly meetings (see attendance policies below). While some members have expertise and experience to lend to the matters which come before the Commission, the Mayor and Council is more interested in receiving input from the "average" citizen. You are not expected to be an expert, and matters requiring engineering expertise or judgment should be referred to appropriate professional staff. What is most important is your willingness to serve and provide input on the many important issues which come before the board.

Meetings

The Traffic and Transportation Commission meets on the fourth Tuesday of each month, at 7:30 p.m. Meetings are usually held at City Hall. Some meetings may be scheduled at other times and/or locations. Most meetings last approximately two hours.

From time to time special meetings or events are held which take place in addition to the regularly scheduled monthly meetings.

Quorum Requirement: A quorum - a majority of the total Commission membership at the time - is necessary in order to conduct official business, take action on motions, etc.

Attendance

Commission members are asked to regularly attend all meetings. Excessive absenteeism, excluding illness or necessary travel, is cause for removal of a member. Three unexcused absences will be considered as a resignation from the Commission. Commission members should notify the staff liaison or chairperson of planned absences prior to the meeting missed.

Length of Term and Reappointment

Commission members are appointed for three-year terms and may apply for reappointment. Members will be notified by the City Clerk's office of their term expiration 60 to 90 days in advance. Those who wish to apply for another term may do so by informing the City Clerk.

Compensation

Commission members serve on a volunteer basis without compensation.

Communications

A briefing packet will be emailed to each Commission member a few days prior to each meeting, as well as posted on the City's website. The briefing packet contains, among other items, the meeting agenda, background materials pertaining to agenda items, and monthly reports on engineering and planning activities. The chairperson receives the agendas and minutes of the Mayor and Council meetings and is expected to keep all members apprised of actions which may be of interest to the Commission.

The Mayor and Council transmit requests to the Commission for recommendation or action through the City Clerk or staff liaison. The Commission transmits its findings, recommendations, or reports to the Mayor and Council via the staff liaison and the City Clerk. Copies of all correspondence to the Mayor and Council should also be sent to the City Manager, the Director of Public Works, and/or the Director of Community Planning and Development Services, as appropriate.

The Commission communicates with the Mayor and Council via monthly meeting minutes, by memorandum, or face-to-face in works sessions or at drop-in sessions. Individual Commission members may contact the Mayor and Council regarding any matter, but is important for members to clarify whether they are expressing personal concerns or opinions, or representing the majority or consensus of the full Commission. Advertising and working with the Planning Commission, the Traffic and Transportation Commission communicates through its own staff liaison and that of the Planning Commission.

The Traffic and Transportation Commission may also advise the City Manager and City staff on matters failing under their respective authority. Recommendations can be made verbally through the staff liaison (to be recorded in the minutes), or through separate memorandum.

Reporting Relationships: Mayor and Council-Commission-Staff

The Traffic and Transportation Commission reports directly to the Mayor and Council; thus its highest business priority should be assigned to Mayor and Council requests and directives.

The staff liaison, via the City Manager, serves as the Mayor and Council's representative to the Commission. The staff liaison is responsible for keeping the City Manager and the Mayor and Council informed through the department head of all Commission activities and decisions.

Commission members and the staff should nurture a shared sense of purpose and work in concert. The staff liaison is assigned to assist the Commission in many ways (see section below), but is not a subordinate of the Commission. While the Commission does not have the authority to issue direct orders to the staff or project work, reports, budgetary decisions, etc., such tasks are often undertaken on a mutually agreed-upon basis. If consensus cannot be achieved on the need for a particular project the Commission desires, this should be communicated to the Mayor and Council, who may at its discretion direct the staff to produce the report.

In actuality, in the interest of getting the important work of the Commission done, and to best serve Mayor and Council's needs, communication goes all ways. The Commission and the staff make every attempt to reach consensus on most issues, and communicate that consensus to the Mayor and Council.

The following outlines the reporting relationships among the Commission, Mayor and Council, and the staff: *Mayor and Council→ City Clerk → City Manager → Board → Staff Liaison.*

Work Sessions

The Mayor and Council hold annual work sessions with each board and commission as well as other meetings when circumstances dictate. These work sessions serve as opportunities for open dialogue regarding matters of mutual concern and to address issues which may have, budgetary or policy impacts.

Meeting Minutes

Minutes of all meetings will be taken by the staff liaison or his/her designee. Minutes provide an important record of Commission actions and serve as a communication tool, keeping the City Manager, City Clerk, and the Mayor and Council informed of the proceedings at monthly meetings.

A draft of the previous month's minutes are distributed with the agenda for the next month's meetings. Commission members should review the draft and come prepared to suggest any changes or corrections.

The Mayor and Council has directed that board and commission meeting minutes be prepared in a *succinct* format. Minutes are to primarily record the actions of each commission. When recording discussions in which no motion is made, the general consensus arising out of the discussion is recorded, along with recommendations for future actions, and who is responsible. Commission members who desire more detailed records of discussion points are encouraged to take their own notes.

Chairperson's Role

The chairperson is appointed to a one-year term by the Mayor. Usually the chairperson position is rotated after one or two years so that different members have the opportunity to serve in this role.

The following are examples of the special duties and responsibilities of the chairperson.

- Lead meetings. Ensures that meetings begin and end on time. Most boards and Commissions meetings are run under Robert's Rules, some more formally than others.
- Plan meeting agendas in cooperation with the staff liaison. Encourages participation by all members at meetings.
- Serve as a primary contact to the City Clerk's Office, staff liaison, and the Mayor and Council. Keeps the City Clerk and Mayor and Council abreast of important issues or problems with the Commission.
- Make recommendations to Mayor and Council for appointments and reappointments of members to the Commission.

The Role of the City Manager's Office

The City Manager's Office coordinates all staff activities for boards and commissions. The City Manager is represented at all board and commission meetings by a staff liaison that is appointed by and responsible to the City Manager through the appropriate department head. The staff liaison's principal role is to provide technical support to the Commission and to facilitate the flow of information between the Mayor and Council and the Commission. He or she is also responsible for keeping the City Manager informed, through the department head, of all Commission activities. (See section below on the **Role of the Staff Liaison**.)

THE ROLE OF THE CITY CLERK'S OFFICE

The City Clerk's Office coordinates many member activities, communication to and from the Mayor and Council and citizens, as well as Commission appointments. The Clerk's Office provides information and interpretations on the role of Commission members, Commission operating policies, appointment procedures, and other questions which arise. Official minutes of meetings and other records are also kept by the Clerk's Office.

The City Clerk will keep the Commission and staff liaison abreast of membership activities by providing copies of all relevant correspondences. A directory of elected and appointed officials and members of all boards, commissions, and committees is also maintained by the City Clerk. The most recent copy of this directory is included.

Staff Liaison's Role

The Chief of Traffic and Transportation (Department of Public Works), or his or her staff designee, serves as the chief staff liaison to the Traffic and Transportation Commission, and is responsible for assisting the Commission in a variety of ways. Responsibilities include:

- Assist in developing the monthly meeting agendas.
- Inform members of items of special interest (periodicals, etc.).
- Ensure the Commission's work complements community goals and that the Commission remains focused on its mission.

- Provide information on Mayor and Council and Planning Commission agenda items or decisions that are of interest to the Commission.
- Research and provide background information and analysis on issues under consideration by the Commission.
- Draft letters, memorandums, and other items of communication, as requested by the Commission.
- Provide for technical assistance - meeting minutes, copying, requesting information from other City departments, etc.

In consideration of the planning issues under the Commission's purview, the Department of Community Development also provides a representative to each monthly meeting.

Budget

While the Traffic and Transportation Commission advises the Mayor and Council and staff on important budgetary and fiscal matters, the Commission has no budgetary authority per se. A small amount is reserved each year in the Public Works budget to support the special Commission activities such as conferences and tours.

PUBLIC ETHICS ORDINANCE

Chapter 16, "**Public Ethics**," of the Rockville City Code requires that members of boards and commissions disqualify themselves from participating in any decision or recommendation by which they, their immediate family, their business associates, or a business entity in -which they have an interest would be directly and economically impacted. In addition, such individuals are required to file a written statement with the City Clerk disclosing any interest or employment, the holding of which would require disqualification from participation, sufficiently in advance of any anticipated action to allow adequate disclosure to the public.

Board and Commission members must disclose in a statement filed with the City Clerk receipt of gifts during the calendar year in excess of $25 in value or a series of gifts totaling $100 or more from entities doing business with the City.

Questions or issues of ethics which arise during a member's term should be referred to the staff liaison or the City Clerk for clarification or guidance.

Lobbying

Recommendations for lobbying efforts are to be referred to the Mayor and Council for review and approval.

Training

At the request of members, or at the suggestion of staff, a variety of training opportunities can be made available. Some commissions have brought in a trainer, others have taken advantage of

videotapes. Types of training sessions which have been requested include 1) How to run an effective meeting; 2) Group dynamics; and 3) Robert's Rules of Order.

Training sessions may also be arranged to cover technical subjects or issues important to the Commission's work. Suggestions for training should be forwarded to the staff liaison or City Clerk.

Open Meetings Law

The State of Maryland has a comprehensive Open Meetings Law. The legislative policy of the statute declare that:

> *It is essential to the maintenance of a democratic society that, except in special and appropriate circumstances ... public business be performed in an open and public manner; and ... citizens be advised and aware of...the performance of public officials; ... the deliberations and decisions that the making of public policy involves.*

The law requires public bodies meet in open session when performing an advisory, legislative, or quasi-legislative function. This law fully applies to Rockville's advisory boards and commissions, including the Traffic and Transportation Commission.

A public body may only close a meeting for one or more of the fourteen enumerated reasons and must limit the discussions to those topics (see appendix). In general, both State law and City policy dictate that Traffic and Transportation Commission meetings should be open to the public in nearly all situations. The Commission is urged to seek the advice of the staff in any situation where closing a meeting is being considered.

Traffic and Transportation Commission
Minutes
Black Eyed Susan Conference Room
Meeting No. 01-16
Tuesday, February 23, 2016 at 7:30 PM

Commissioners Present: Jude Abanulo, Garrett Clemons, Thomas Gibney, Cynthia Griffiths, Gerald Holtz, Alan Kaplan, Jeremy Martin, Mike Stein, and Melvin Willis

Guest : Janet Wilson, Pat Harris, Mike Workosky, William Zeid, Rick Lundregan, Frank Poli, Mark Silverwood.

City Staff : Brian Wilson, Katie Mencarini, Daniel Seo

1. **General Announcements, Introduction of Guests and Public Comment Period**
   a. Commissioner Martin called the meeting to order at 7:30 p.m.
   b. All attendees introduced themselves.

2. **Election of New Chairperson**
   a. Commissioner Gibney made a motion, seconded by Commissioner Griffiths, to elect Commissioner Abanulo as chair. This motion passed unanimously.

3. **15931 N. Fredrick Road (CarMax) Development: Staff Introduction:**
   a. Ms. Mencarini introduced the proposed development.

4. **15931 N. Fredrick Road (CarMax) Development: Applicant Presentation**
   a. Mr. Workosky, Wellls & Assoicates, presented the traffic impact study including existing conditions, background developments, trip generation and site accesses, future conditions and mitigations.

5. **15931 N. Fredrick Road (CarMax) Development: Commission Discussion**
   a. The Commission discussed transportation elements of the proposed development including transit trip reduction, site accesses, proposed parking spaces, intersection capacity and overcapacity of Shady Grove Metro.
   b. Commissioner Willis made a motion to recommend approval of the proposed development with conditions. The motion was seconded by Commissioner Griffiths. The motion passed 6-3-0 with Commissioners Gibney, Holtz, and Kaplan opposing.
   c. Conditions, outlined in motion to recommend approval are as follows:
      i. The applicant should accelerate the proposed lane use change (lane re-stripping and signal modification) on WMATA access road at MD 355.
      ii. The applicant should consider "No Construction Truck" signs at the entrances of the City roadways along MD 355, when the construction begins.

6. Intersection of Monroe Street and Monroe Place: Commission Discussion

a. The Commission reviewed the police report regarding a recent pedestrian crash at the intersection and discussed possible options to improve safety including a curb extension on Monroe Place.
b. Ms. Janet Wilson stated that she raised her safety concern at the intersection in the past.
c. The Commission asked City staff to look into possible improvement options.

7. County's School Bus Depot at 850 Hungerford Drive: Commission Discussion

a. The Commission discussed residents' concerns regarding the County's plan to relocate their Shady Grove school bus depot to the Carver Educational Services Center at 850 Hungerford Drive.
b. The Commission discussed possible traffic capacity issues and pedestrian safety issues due to the proposed development.
c. Commissioner Gibney made a motion, second by Commissioner Griffiths, to add its voice to the concerned citizens who spoke at the February 22 Mayor and Council meeting and to urge the Planning Commission to thoroughly review the application once it is submitted and send the transportation elements to the Commission for review. The motion passed unanimously.

8. Review and Approve October 2016 Meeting Minutes

a. Commissioner Gibney made a motion to approve the October 2016 meeting minutes and Commissioner Holtz seconded the motion, which passed 5-0-4 with Commissioners Clemons, Martin, Stein, and Willis abstaining due to absence at the October meeting.

9. Staff Report and Updates

a. Staff provided the Weekly Report.

The meeting was adjourned at 9:45 p.m.